Vol. II. INDIANAPOLIS, Ia., OCTOBER 19, 1846. No. 20 & 21

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S. V. B. NOEL, *Publisher and Printer.*

WESTERN FARMER AND GARDENER.

INDIANAPOLIS, THURSDAY, OCTOBER 15, 1846.

Almost every family purchases an almanac of some kind. Many of those now issued from the Press contain very little that is useful aside from their calendar pages. They are, generally, filled with uncouth wood-cuts and pointless anecdotes. At the close of the year they are cast aside without having been the means of doing any good. Much valuable information may be imparted to the people through the medium of a well devised almanac. Hereafter, yearly there will be issued from this office an Almanac designed to meet the wants of those who may desire one that will be worth preserving. The first number, for 1847, has just been issued, and we now present it to our patrons in the form of a double number of the Farmer and Gardener. The same course will be adopted near the close of each succeeding volume. This new feature in our publication will, we think, be acceptable to our readers, as by it, they have, in a form which may be easily preserved for future reference, many facts not to be attained by any other means.

A DISTINGUISHED VISITOR.—Our town was honored on the night of the 27th of Sept. with the arrival of that distinguished arctic traveller John Frost; some times irreverently styled *Jack Frost.* Being an early riser he was found in our streets long before day. He refused all offers of hospitality; nothing would induce him to tarry, and he left soon after sunrise; not, however, without promising another and longer visit at an early day. He seemed to take great pleasure in horticultural matters, and visited nearly every garden in the place, examining flowers and vegetables with great particularity. He is an eminent botanist, and is known to be personally familiar with every plant which grows in the northern hemisphere. He expressed great sympathy for the sick, and was of opinion that on his next arrival he could very much diminish the causes of sickness. His success as a physician has been eminent; and in two visits he has succeeded often, in checking yellow fever in large districts.

MR. BEECHER, the editor of this publication, is now absent, but will be at home in time to prepare copy for the next number.

INFALLIBLE TEST OF GOOD EGGS. Housewives are often puzzled to know whether an egg is good. It may *always* be known—by breaking it!

A Dutch proverb says, "Stealing never makes a man rich; charity never makes a man poor; and prayer never hinders a man's business."

Dominical Letter,	C	Shrove Sunday	Feb. 14
Golden Number,	5	Easter Sunday	April 4
Epact,	14	Rogation Sunday,	May 9
Solar Cycle,	8	Ascension Day,	May 13
Roman Indiction,	5	Whitsunday,	May 23
Julien Period,	6560	Trinity Sunday,	May 30
Septuagesima Sunday	Jan. 31	Advent Sunday,	Nov. 28

1. Venus (♀) will be Evening Star, until October 3d, then Morning Star, until July 22d, 1848.

2. The Moon will run highest this year, about the 27th degree of (♊) Gemini, and lowest about the 27th degree of (♐) Sagittarius.

3. Latitude of Herschel, (♅) about 39′ 30″ south this year.

4. Longitude of the Moon's ascending Node (☊) in the middle of this year 5 signs, 14 degrees.

5. Mean obliquity of the Ecliptic in the middle of this year, 24° 27′ 33 1″. True obliquity same time, 23° 27′ 23 6″.

ECLIPSES.

There will be two Eclipses of the Sun, and two of the Moon this year.

I. There will be an Eclipse of the Moon at the time of Full Moon, on Wednesday, March 31st in the afternoon, invisible in America. Visible in the eastern hemisphere.

II. There will be an Eclipse of the Sun on the 15th of April, at the time of New Moon in the morning, invisible in America. This Eclipse will be visible at the Cape of Good Hope, Madagascar, Australia, Borneo, Sumatra, Java, and the neighboring Islands. It will be central and total on the meridian in longitude 89° 58′ east from Greenwich, and latitude 24° 30′ south. Its chief visibility will be in the Indian Ocean, and the adjacent tract of the Southern Ocean, extending to 80° of south latitude.

III. There will be an Eclipse of the Moon on the 24th of September, at the time of Full Moon in the morning, invisible. The beginning of this Eclipse may be seen at California and the Oregon Territory, and at Alaska the whole will be visible.

IV. There will be an Eclipse of the Sun on Saturday, the 9th of October, at the time of New Moon in the morning, invisible in America. Visible in Europe, the greater part of Asia, and the northern part of Africa. This Eclipse will be central and annular on the meridian in longitude 47° 11′ east from Greenwich, and latitude 31° 22′ north. It will be annular in the south part of Great Britain and Ireland, and in the north of France. The centre will pass very little south of Cape Clear in Ireland about 15 miles south of Exter, in England, and about the like distance north of Havre, in France; but the annular phase of the Eclipse will extend for more than 100 miles on each side of the path of the centre.

TABLE OF THE SOLAR SYSTEM.

NAMES.	Mean diam. in English miles	Mean distance from the Sun.	Time of rotation round their axes.	Time of revolution round the Sun.
				D. H. M. S.
The Sun,	883,246		25d. 14h. 8m. 0s.	
Mercury,	3,224	37,000,000	1 0 5 28	87 23 15 43
Venus,	7,687	68,000,000	0 23 20 54	224 16 49 10
The Earth,	7,912	95,000,000	0 23 56 4	366 6 9 12
The Moon,	2,180	95,000,000	27 7 48 0	
Mars,	4,189	144,000,000	1 0 39 22	686 23 30 35
Vesta,	238	225,000,000		
Juno,	1,425	252,000,000		
Ceres,	160	263,000,000	. . . . .	1,703 16 48 0
Pallas,	110	265,000,000		
Jupiter,	89,170	490,000,000	0 9 55 37	4,332 14 27 10
Saturn,	79,042	900,000,000	0 10 16	10,759 1 51 11
Herschell,	35,113	1,800,000,000		30,737 18 0

WESTERN FARMER AND GARDENER,

Edited by HENRY WARD BEECHER, *Indianapolis.*

SIX REASONS FOR TAKING IT. 1. Because it forms a large volume filled with practical information at a price so cheap that the poorest laborer can afford to take it; or rather, the poorest farmer cannot afford to be without it.—2. Because it is a Western work, filled with information adopted to *our* farms, *our* orchards and *our* gardens, as no Eastern periodical can be.—3. Because every intelligent cultivator of the soil ought to know what discoveries and improvments are made in his vocation.—4. Because in it are brought together the various experiments of European, Eastern and Western cultivators.—5. Because farmers ought to have some organ in which they can communicate with each other about their own business, compare processes, discuss principles, relate facts—ask questions—and solve enquiries.—6. Because it will contain receipts, house-hold directions, which will make it useful to every house-wife who manages a poultry yard, flower-garden, dairy, or who owns a cellar, a kitchen, a parlor, or a cup-board. It is published at Indianapolis, Indiana, twice a month, for *one dollar* to single subscribers; for *fifty cents* when a club of ten or more is formed. *Payment invariably in advance.*

MOON'S PHASES.

	D.	H.	M.	
Full Moon	1	9	12	*M.*
Last Quar.	9	1	10	*E.*
New Moon	16	7	13	*E.*

MOON'S PHASES, Continued—

	D.	H.	M.	
First Quar.	23	10	48	*M.*
Full Moon	31	2	29	*M.*

For Kentucky, Ohio, Indiana, Illinois, and Missouri.

Days of Week.	D's of Month.	*VARIOUS PHENOMENA.*	Sun's de. M. ° ′	Sun Slow. m. s.	Moon South. h. m.	☉ Decl. S.	Sun Rises. h. m.	Sun Sets. h. m.	Moon Rises. h. m.
Fri.	1	Sun in perigee. ☐ ○ ♅	23 1	3 49	Morn.	♑	7 16	4 44	Rises.
Satur.	2		22 56	4 17	0 32	♑	7 16	4 44	6 20
Sun.	3		22 51	4 45	1 21	♑	7 15	4 45	7 17
Mon.	4		22 45	5 12	2 7	♑	7 15	4 45	8 12
Tues.	5	♃ South 9 h. 24 m.	22 38	5 39	2 51	♏	7 15	4 45	9 17
Wedn.	6	☾ in apogee.	22 31	6 6	3 34	♏	7 14	4 46	10
Thurs.	7	Betelguese s. 10 h. 39 m.	22 24	6 32	4 16	♏	7 14	4 46	10 50
Fri.	8		22 16	6 58	4 58	♎	7 13	4 47	11 50
Satur.	9	☾ ☌	22 7	7 28	5 41	♎	7 13	4 47	Morn.
Sun.	10		21 59	7 47	6 25	♏	7 13	4 48	0 48
Mon.	11		21 50	8 11	7 12	♏	7 12	4 48	1 44
Tues.	12	♈s set 3 h. 45 m.	21 40	8 35	8 2	♏	7 11	4 49	2 42
Wedn.	13		21 30	8 58	8 55	♐	7 10	4 50	3 42
Thurs.	14	Moon runs low.	21 20	9 20	9 51	♐	7 10	4 50	4 41
Fri.	15	♃ South 8 h. 42 m.	21 9	9 42	10 49	♑	7 9	4 51	5 39
Satur.	16		20 58	10 2	11 48	♑	7 8	4 52	Sets.
Sun.	17		20 42	10 23	ev. 47	♒	7 8	4 52	6 18
Mon.	18	Moon in perigee.	20 34	10 42	1 44	♒	7 7	4 53	7 29
Tues.	19	Vega rises 1 h. 41 m.	20 21	11 1	2 40	♓	7 6	4 54	8 39
Wedn.	20	○ enters ♒ Fabias.	20 9	11 19	3 34	♓	7 5	4 55	9 48
Thurs.	21		19 56	11 36	4 26	♈	7 5	4 55	10 55
Fri.	22	♃ South 8 h. 13 m. ☾ ♉	19 42	11 53	5 19	♈	7 4	4 56	Morn.
Satur.	23		19 28	12 8	6 10	♉	7 3	4 57	0 1
Sun.	24		19 14	12 23	7 2	♉	7 2	4 58	1 5
Mon.	25		18 59	12 37	7 55	☐	7 1	4 59	2 6
Tues.	26	Jupiter sets, 9 h. 20 m.	18 44	12 51	8 46	☐	7 0	5 0	3 5
Wedn.	27	☾ runs high.	18 29	13 3	9 38	☐	6 59	5 1	3 59
Thurs.	28	Betelguese so. 9 h. 16 m.	18 13	13 15	10 28	♋	6 59	5 1	4 49
Fri.	29		17 57	13 25	11 16	♋	6 58	5 2	5 34
Satur.	30		17 41	13 35	Morn.	♌	6 57	5 3	6 15
Sun.	31	Jup. sta.	7 24	13 44	0 3	♌	6 56	5 4	Rises.

ICE HARVEST. If you have done as you ought to have done, you have a snug ice house, with double walls, the space between which is filled with non-conducting substances, as pulverized charcoal, or dried saw-dust, or tan-bark, which are mentioned in the order of their value. Cut your blocks of ice of a size and shape with reference to close packing. Cover over thickly with clean straw when the stock of ice is all in. Look out not to lose all your chance in waiting for a better one; sometimes careful folks mean to have such glorious ice, that an open winter cheats them out of any at all.

WARMTH. The best fire in winter is made up of *exercise*, and the poorest, of *whiskey*. He that keeps warm on liquor is like a man who pulls his house to pieces to feed the fire place. The prudent and temperate use of liquor is to let it alone. If you don't touch it, it certainly won't hurt you; he that says there is no danger, boasts that he is something more than other men.

The way to summer your cattle well is to winter them well; and half the secret of good wintering is *to keep them warm*. Animal heat is generated in proportion to the abundance and excellence of their food. Exposure to the cold air withdraws heat rapidly, and of course makes more food necessary to re-supply it, just as an open door makes it necessary to have more wood in the stove. If your stock run down in the winter and come out lean and feeble, all the summer will not fully bring them up again.

MOON'S PHASES.

	D.	H.	M.	
Last Quar.	8	8	9	*M.*
New Moon,	15	5	56	*E.*

MOON'S PHASES. Continued—

	D.	H.	M.	
First Quar.	21	10	29	*M.*

For Kentucky, Ohio, Indiana, Illinois, and Missouri.

Days of Week.	D's of Month.	*VARIOUS PHENOMENA.*	Sun's de. S. ° ′	Sun Slow. m. s.	Moon South. h. m.	Decl. S.	Sun Rises. h. m.	Sun Sets. h. m.	Moon Rises. h. m.
Mon.	1	♃ sets 2 h. 52 m.	17 7	13 53	0 47	♑	6 55	5 5	6 59
Tues.	2		16 50	14 0	1 31	♑	6 54	5 6	7 53
Wedn.	3	☽ in apogee.	16 33	14 7	2 13	♑	6 53	5 7	8 48
Thurs.	4		16 16	14 13	2 55	♒	6 52	5 8	9 42
Fri.	5		15 57	14 18	3 38	♒	6 51	5 9	10 37
Satur.	6	Sirius south 6 h. 32 m. ☽ ☌	15 38	14 22	4 21	♒	6 50	5 10	11 33
Sun.	7	Sexagesima. ☌ ☿ ♄	15 20	14 25	5 6	♏	6 49	5 11	Morn.
Mon.	8		15 1	14 28	5 53	♏	6 48	5 12	0 29
Tues.	9	♃ sets 2 h. 21 m.	14 42	14 30	6 43	♐	6 46	5 14	1 27
Wedn.	10	Procyon south 10 h. 9 m.	14 22	14 31	7 36	♐	6 45	5 15	2 24
Thurs.	11	☽ runs low.	14 3	14 30	8 31	♑	6 44	5 16	3 21
Fri.	12	Sirius south 9 h. 8 m.	13 43	14 31	9 28	♑	6 43	5 17	4 10
Satur.	13		13 23	14 30	10 27	♑	6 42	5 18	5 7
Sun.	14		13 3	14 28	11 25	♒	6 41	5 19	5 55
Mon.	15	☽ in perigee.	12 42	14 26	ev. 23	♒	6 40	5 20	Sets.
Tues.	16	Superior ☌ ☉ ☿.	12 21	14 22	1 20	♓	6 39	5 21	7 27
Wedn.	17	Ash Wednesday.	12 1	14 18	2 15		6 38	5 22	8 37
Thurs.	18	Moon ☋.	11 39	14 13	3 19	♈	6 36	5 24	9 47
Fri.	19	☉ enters ♓.	11 18	14 8	4 4	♈	6 35	5 25	10 54
Satur.	20	♃ sets 1 h. 40 m.	10 57	14 2	4 57	♉	6 34	5 26	11 58
Sun.	21	First Sunday in Lent.	10 35	13 55	5 50	♉	6 33	5 27	Morn.
Mon.	22	☌ ☉ ♄.	10 13	13 47	6 43	□	6 32	5 28	0 59
Tues.	23	☽ runs high.	9 51	13 39	7 35	□	6 31	5 29	1 55
Wedn.	24		9 29	13 30	8 55	♊	6 30	5 30	2 46
Thurs.	25		9 7	13 21	9 13	♊	6 28	5 32	3 33
Fri.	26	□ ☉ Jupiter.	8 45	13 11	10 0	☋	6 27	5 33	4 14
Satur.	27		8 22	13 0	10 45	☋	6 26	5 34	4 52
Sun.	28		6 0	12 49	11 29	☋	6 25	5 35	5 27

WORK FOR FEBRUARY. Get out rails, both for present use, and for the fence which you expect to lay in March and April. Cut, haul and stack up near your house a good supply of *fire-wood*; no matter if the forest is within ten rods of your door, your wife ought to have her wood chopped and dried ready for use. Look at every fence upon the place; see if the corners of your rail fences are rotting down; if some rails have not broken; if pig-holes have not been made; if boys and cattle have not thrown down top-rails; and in short, put your fences into proper repair.

Of course your tools will now be overhauled; those with steel blades should be thoroughly cleansed when laid aside in the Fall, and if you rub a little oil over them and hang them up, all the better. Repair all that are out of order. These things, and all your ordinary work, may be done, and still leave you leisure for *reading*. You should have good books and good papers, and read them carefully for your own sake and for your children's. A man who brings up a family of ignorant children, cheats his children of their rights, and cheats his country of its rights; it is therefore a crime.

GARDEN WORK. If there be no snow on the ground, the gardens may be cleared of all rubbish, manure hauled and stacked carefully; and if you have a clay soil, and can catch the ground without frost for a few days, it will mellow and ameliorate it to spade it up, leaving it in lumps and heaps, through which the frost may thoroughly penetrate.

It is time to prepare your hot-bed, if you design having early plants in your garden. (*See directions for hot-beds, page* 19.)

MOON'S PHASES.

	D.	H.	M.	
Full Moon	1	9	29	*E.*
Last Quar.	9	11	9	*E.*
New Moon	16	3	41	*E.*

MOON'S PHASES. Continued—

	D.	H.	M.	
First Quar.	23	0	11	*E.*
Full Moon	31	3	47	*E.*

For Kentucky, Ohio, Indiana, Illinois, and Missouri.

Days of Week.	D's of Month.	*VARIOUS PHENOMENA.*	Sun's de. N. ° ′	Sun Slow. m. s.	Moon South. h. m.	☉ Decl. S.	Sun Rises. h. m.	Sun Sets. h. m.	Moon Sets. h. m.
Mon.	1		7 37	12 37	Morn.	♍	6 24	5 36	5 59
Tues.	2	☽ in apogee.	7 14	12 25	0 12	♍	6 22	5 38	Rises.
Wedn.	3		6 54	12 12	0 54	♍	6 21	5 39	7 36
Thurs.	4	☿ sets 7 h. 26 m.	6 28	11 59	1 36	♎	6 20	5 40	8 31
Fri.	5	☽ ☊	6 5	11 45	2 19	♎	6 19	5 41	9 26
Satur.	6	Procyon south, 8 h. 35 m.	5 42	11 31	3 3	♏	6 18	5 42	10 22
Sun.	7		5 19	11 17	3 49	♏	6 16	5 44	11 18
Mon.	8		4 55	11 2	4 37	♏	6 15	5 45	Morn.
Tues.	9	Regulus south 10 h. 51 m.	4 32	10 47	5 27	♐	6 14	5 46	0 14
Wedn.	10	☽ runs low.	4 8	10 31	6 20	♐	6 13	5 47	1 10
Thurs.	11		3 45	10 16	7 14	♑	6 12	5 48	2 3
Fri.	12		3 21	10 0	8 10	♑	6 10	5 50	2 54
Satur.	13	♅ discovered, 1781.	2 58	9 43	9 7	♒	6 9	5 51	3 42
Sun.	14	☿ greatest elong. E.	2 34	9 26	10 4	♒	6 8	5 52	4 27
Mon.	15		2 10	9 9	11 1	♓	6 7	5 53	5 10
Tues.	16	☽ in perigee.	1 47	8 52	11 57	♓	6 5	5 55	Sets.
Wedn.	17		1 23	8 35	ev. 53	♈	6 4	5 56	7 23
Thurs.	18	☽ ☊.	0 59	8 17	1 49	♈	6 3	5 57	8 33
Fri.	19	Procyon south, 7 h. 44 m.	0 36	7 59	2 45	♉	6 2	5 58	9 46
Satur.	20		S. 12	7 42	3 40	♉	6 1	5 59	10 46
Sun.	21	○ent ♈. ☿ stat.	N. 12	7 23	4 35	□	5 59	6 1	11 31
Mon.	22	☽ runs high.	0 5	7 5	5 29	□	5 58	6 2	Morn.
Tues.	23		0 59	6 47	6 20	♊	5 57	6 3	0 49
Wedn.	24	☿ sets 8 h. 11 m.	1 23	6 28	7 10	♊	5 56	6 4	1 29
Thurs.	25		1 46	6 10	7 58	♊	5 55	6 5	2 13
Fri.	26		2 10	5 51	8 43	♋	5 53	6 7	2 53
Satur.	27	Regulus south 9 h. 41 m.	2 33	5 33	9 27	♋	5 52	6 8	3 28
Sun.	28	Palm Sunday.	2 57	5 14	10 10	♌	5 51	6 9	4 1
Mon.	29	Moon in apogee.	3 20	4 56	10 52	♌	5 50	6 10	4 33
Tues.	30		3 43	4 37	11 35	♌	5 49	6 11	5 3
Wedn.	31	Inferior ☌ ○ ☿	4 7	4 19	Morn.	♎	5 47	6 12	Rises.

Work for March. Begin the year by thorough, deep plowing, where your fields are in good order for it. Depend upon it, that deep plowing is the only good plowing. Your first crop, generally, will tell you so. But if the subsoil is such that the first crop is rather poor, a year's exposure of the land will ameliorate it so that your second crop will remunerate all expenses of time and labor laid out in deep plowing. No farmer should be without a subsoil plow who has got his lands clear of stumps and roots.

Take especial care of cows now just coming in with calf. See that those which are heavy are carefully handled, well fed, and warmly sheltered. Mares with foal should be tenderly used, exercised a little, but not put to hard or straining work. *The condition of the mother will to a great extent determine the condition of the offspring.* Cows, mares, sows, ewes, &c. &c., should be kept in a hearty condition, without being *fat*.

Orchard. Do not trouble your trees with premature pruning. Let the axe, and knife, and saw alone. Loosen the dirt or sod around and beneath your trees. The best manure for your trees is fresh mold, or forest soil and lime in the proportion of about one part to ten. Take soft soap, dilute it with urine, scrub your trees with it plentifully, having first scraped off all rough bark. If you would work easily always, never let your work drive you.

MOON'S PHASES.

	D.	H.	M.
Last Quar.	8	9	56 *M.*
New Moon,	15	0	52 *M.*

MOON'S PHASES.

	D.	H.	M.
First Quar.	22	3	39 *M.*
Full Moon,	30	7	56 *M.*

For Kentucky, Ohio, Indiana, Illinois, and Missouri.

Days of Week.	D's of Month.	*VARIOUS PHENOMENA.*	Sun's de. N. ° ′	Sun Slow. m. s.	Moon South. h. m.	☉ ♋ Decl.	Sun Rises. h. m.	Sun Sets. h. m.	Moon Rises. h. m.
Thurs.	1	☽ ☌ ♌	4 30	4 0	0 18	♎	5 46	6 14	7 21
Fri.	2		4 53	3 42	1 2	♏	5 45	6 15	8 17
Satur.	3		5 16	3 24	1 47	♏	5 44	6 16	9 13
Sun.	4	☿ ☌ ☉ ♓	5 39	3 6	2 34	♐	5 43	6 17	10 9
Mon.	5	Regulus south, 9 h. 5 m.	6 2	2 48	3 24	♐	5 41	6 19	11 5
Tues.	6	☽ runs low.	6 24	2 30	4 15	♐	5 40	6 20	11 57
Wedn.	7	♀ sets, 8 h. 44 m.	6 47	2 13	5 8	♑	5 39	6 21	Morn.
Thurs.	8		7 9	1 56	6 2	♑	5 38	6 22	0 48
Fri.	9		7 32	1 39	6 50	♒	5 37	6 23	1 36
Satur.	10	Spica ♍ sduth, 0 h. 6 m.	7 54	1 22	7 51	♒	5 36	6 24	2 20
Sun.	11		8 16	1 6	8 45	♓	5 34	6 26	3 2
Mon.	12		8 38	0 50	9 40	♓	5 33	6 27	3 42
Tues.	13	☿ stat. Moon in perigee.	9 0	0 34	10 35	♈	5 32	6 28	4 22
Wedn.	14	☽ ♉	9 22	0 19	11 31	♈	5 31	6 29	5 2
Thurs.	15		9 43	Slow 4	ev. 27	♉	5 30	6 30	Sets.
Fri.	16	Spica ♍ south, 11 h. 38 m.	10 5	Fa. 11	1 24	♉	5 29	6 31	8 25
Satur.	17		10 26	0 25	2 20	□	5 28	6 32	9 30
Sun.	18	Second Sunday after Easter.	10 47	0 39	3 16	□	5 26	6 34	10 29
Mon.	19	☽ runs high.	11 8	0 53	4 11	□	5 25	6 35	11 22
Tues.	20	☾ enters ♉.	11 28	1 6	5 3	♊	5 24	6 36	Morn.
Wedn.	21		11 49	1 19	5 52	♊	5 23	6 37	0 9
Thurs.	22	4 sets 10 h. 18 m.	12 9	1 31	6 39	♌	5 22	6 38	0 51
Fri.	23		12 29	1 43	7 24	♌	5 21	6 39	1 28
Satur.	24	Spica ♍ south, 11 h. 7 m.	12 49	1 55	8 8	♌	5 20	6 40	2 2
Sun.	25		13 9	2 6	8 50	♍	5 19	6 41	2 34
Mon.	26	☽ in apogee.	13 28	2 16	9 32	♍	5 18	6 42	3 5
Tues.	27		13 48	2 27	10 15	♎	5 17	6 43	3 35
Wedn.	28	☿ 's greatest elong. W. ☽ ☊.	14 7	2 36	10 59	♎	5 16	6 44	4 6
Thurs.	29		14 25	2 45	11 44	♎	5 15	6 45	4 39
Fri.	30	♀ sets 9 h. 36 m.	14 44	2 54	Morn.	♏	5 13	6 47	Rises.

Work for April. Gather from your barn the loose hay seed, and sow it upon your wheat fields, it will give good pasturage after harvest, and make fine stuff for plowing under. Push forward your plowing, but look well to the teams; as cattle and horses are like men, unable in early spring to endure severe labor all at once. Your spring wheat should be got in; barley is a better crop, usually, than rye. The middle and last of the month will keep you in the corn-field. Plow deep—plow thoroughly; and after planting, give the plow no rest, if you wish good corn.

Young Animals. You will now begin to have plenty of calves, colts, pigs, and lambs. If you mean to have profitable pork, you ought to *push* your pigs from the birth. Look carefully after your lambs; see that the mothers are well cared for; have dry and warm pens for any that are feeble. A little tenderness to the lambs will be well repaid by and bye.

Garden. Your lettuce may be transplanted from the hot-bed the middle and last of this month. A foot apart is none too much, if you wish head-lettuce. Sow your main supplies of radishes, cabbage, tomatos, &c. Get your pie-plant seed in early as possible; also carrots, parsneps, and salsify or oyster-plant. Prune your gooseberries, currents, and raspberry bushes. Grapes, which were not laid in last fall should be pruned and laid in early in March; but if neglected then, let them be till the leaves are large as the palm of your hand. Look out for worm's nests, and destroy them promptly.

MOON'S PHASES.

	D.	H.	M.	
Last Quar.	7	5	19	*E.*
New Moon,	14	9	53	*M.*

MOON'S PHASES.

	D.	H.	M.	
First Quar.	21	8	29	*E.*
Full Moon,	29	9	16	*E.*

For Kentucky, Ohio, Indiana, Illinois, and Missouri.

Days of Week.	D's of Month.	*VARIOUS PHENOMENA.*	Sun's de. N. ° ′	Sun Fast. m. s.	Moon South. h. m.	Decl. S. ☽	Sun Rises. h. m.	Sun Sets. h. m.	Moon Rises. h. m.
Satur.	1		15 2	3 2	0 31	♍	5 12	6 48	8 4
Sun.	2	Fourth Sunday after Easter.	15 20	3 9	1 20	♎	5 11	6 49	9 0
Mon.	3	☽ runs low.	15 38	3 16	2 12	♎	5 10	6 50	9 54
Tues.	4		15 56	3 23	3 4	♎	5 9	6 51	10 46
Wedn.	5	☿ in perihelion.	16 10	3 29	3 58	♏	5 8	6 52	11 34
Thurs.	6	☌ ☿ ♃	16 30	3 34	4 52	♏	5 8	6 52	Morn.
Fri.	7	♃ sets 9 h. 34 m.	16 47	3 39	5 45	♐	5 7	6 53	0 19
Satur.	8	Spica ♍ south, 10 h. 12 m.	17 3	3 43	6 38	♐	5 6	6 54	1 0
Sun.	9		17 19	3 46	7 31	♑	5 5	6 55	1 39
Mon.	10		17 35	3 49	8 24	♑	5 4	6 56	2 18
Tues.	11	☽ in perigee.	17 51	3 51	9 17	♈	5 3	6 57	2 55
Wedn.	12	☽ ☌	18 6	3 53	10 12	♈	5 2	6 58	3 36
Thurs.	13	Ascension day.	18 21	3 54	11 7	♉	5 1	6 59	4 18
Fri.	14		18 36	3 55	ev. 4	♉	5 0	7 0	Sets.
Satur.	15	Arcturus south, 10 h. 36 m.	18 50	3 55	1 1	□	4 59	7 1	8 12
Sun.	16	☽ runs high.	19 4	3 54	1 57	□	4 59	7 1	9 9
Mon.	17		19 18	3 53	2 51	♊	4 58	7 2	10 1
Tues.	18	☿ sets 10 h. 6 m.	19 31	3 51	3 43	♊	4 57	7 3	10 46
Wedn.	19		19 44	3 49	4 32	♋	4 56	7 4	11 56
Thurs.	20		19 57	3 46	5 13	♋	4 55	7 5	Morn.
Fri.	21	☉ enters □.	20 10	3 43	6 2	♋	4 52	7 5	0 2
Satur.	22	Spica ♍ south, 9 h. 17 m.	20 22	3 39	6 46	♍	4 54	7 6	0 35
Sun.	23	Whit Sunday. ☽ in apogee.	20 33	3 35	7 29	♍	4 53	7 7	1 6
Mon.	24		20 45	3 30	8 11	♎	4 52	7 8	1 36
Tues.	25	☽ ☌.	20 56	3 25	8 54	♎	4 52	7 8	2 7
Wedn.	26		21 6	3 19	9 38	♎	4 51	7 9	2 38
Thurs.	27	Arcturus south, 9 h. 49 m.	21 17	3 12	10 25	□	4 50	7 10	3 12
Fri.	28		21 27	3 6	11 14	□	4 50	7 10	3 49
Satur.	29		21 36	2 58	Morn.	♐	4 49	7 11	Rises.
Sun.	30	Trinity Sunday.	24 45	2 51	0 5	♐	4 49	7 11	7 49
Mon.	31	Moon runs low.	21 54	2 43	0 59	♐	4 48	7 12	8 42

WORK FOR MAY. Your whole force will be required in this month. If the season has been late or wet, you still have your corn to plant. Pastures will be ready for your stock; remember to salt your stock every week. Weeds will now do their best to take your crops. Your potato crop should be put in, as there will be little danger of frost. After the 15th, you may put out sweet-potato slips. If you have not grass-land for pasturage, try for one season, the system of *soiling*, i. e. keeping up your cattle in the yard or home-lot, and cutting green-fodder for them every day. An aker or two of corn, sown broad-cast, or oats and millet, should be tried. Above all other things, if you have warm, deep sandy loam, put in an aker of lucerne.

During the last of this month, and at the beginning of the next, pruning may be done. If the limbs be large, cover the stump with a coat of paint, wax, grafting clay, or any thing that will exclude air and wet.

The garden will require extra labor in all this month. After the 15th, tender bulbs and tubers may be planted, dahlias, amarylises, tuberoses, &c. Peas will require brush; all your plants from the hot-bed should by this time be well a growing in open air. Roses will be showing their buds. If large roses of a favorite sort are required, more than half the buds should be taken off, and the whole strength of the plant be given to the remainder. The soil for this best of all flowers, cannot be too rich, nor too deep.

MOON'S PHASES.

D. H. M.
Last Quar. 5 19 36 *E.*
Full Moon, 28 7 53 *M.*

MOON'S PHASES.

D. H. M.
First Quar. 20 2 2 *E.*
New Moon, 12 7 22 *E.*

For Kentucky, Ohio, Indiana, Illinois, and Missouri.

Days of Week.	D's of Month.	*VARIOUS PHENOMENA.*	Sun's de N. ° ′	Sun Fast. m. s	Moon South. h. m.	Decl. S. ☉	Sun Rises. h. m.	Sun Sets. h. m.	Moon Rises. h. m
Tues.	1	♀ sets 10 h. 12 m.	22 3	2 34	1 53	♑	4 48	7 12	9 32
Wedn.	2	Arcturus south, 9 h. 25 m.	22 11	2 25	2 48	♑	4 47	7 13	10 19
Thurs.	3	☐ ○ ♄.	22 18	2 16	3 42	♒	4 47	7 13	11 00
Fri.	4	Superior ☌ ○ ☿.	22 25	2 6	4 35	♒	4 46	7 13	11 41
Satur.	5	☌ ● ♄.	22 32	1 56	5 28	♓	4 46	7 14	Morn.
Sun.	6		22 39	1 45	6 20	♓	4 45	7 16	0 10
Mon.	7	● in perigee.	22 45	1 34	7 11	♈	4 45	7 15	0 56
Tues.	8	Moon ☊.	22 51	1 23	8 4	♈	4 45	7 15	1 31
Wedn.	9		22 56	1 18	8 57	♉	4 44	7 16	2 14
Thurs.	10	Arcturus south 8 h. 54 m.	23 1	1 0	9 52	♉	4 44	7 16	2 56
Fri.	11		23 5	0 48	10 47	☐	4 44	7 16	3 42
Satur.	12		23 9	0 36	11 43	☐	4 43	7 17	Sets.
Sun.	13	● runs high.	23 13	0 24	ev. 39	♊	4 43	7 17	7 50
Mon.	14	♀ sets 10 h. 16 m.	23 16	F'st 11	1 32	♊	4 43	7 17	8 39
Tues.	15	Antares south 10 h. 45 m.	23 19	Slow 2	2 23	♋	4 43	7 17	9 22
Wedn.	16	☌ ● ♀.	23 21	0 15	3 11	♋	4 43	7 17	10 0
Thurs.	17		23 23	0 27	3 57	♌	4 42	7 18	10 34
Fri.	18		23 25	0 40	4 41	♌	4 42	7 18	11 36
Satur.	19		23 26	0 53	5 24	♍	4 42	7 18	11 37
Sun.	20	☽ in appgee. ☌ ○ ♃	23 27	0 6	6 6	♍	4 42	7 18	Morn.
Mon.	21	○ enters ♋.	23 27	1 19	6 49	♎	4 42	7 18	0 7
Tues.	22	● ☍.	23 27	1 32	7 32	♎	4 42	7 18	0 38
Wedn.	23	Antares south 10 h. 13 m.	23 27	1 45	8 18	♍	4 42	7 18	1 11
Thurs.	24	♄ stationary.	23 26	1 58	9 5	♍	4 42	7 18	1 46
Fri.	25	☿'s gr. Helio. lat. S.	23 25	2 11	9 55	♍	4 42	7 18	2 25
Satur.	26		23 23	2 23	10 48	♐	4 42	7 18	3 9
Sun.	27		23 22	2 36	11 43	♐	4 43	7 17	3 59
Mon.	28		23 18	2 48	Morn.	♑	4 43	7 17	Rises.
Tues.	29		23 15	3 0	0 34	♑	4 43	7 17	8 15
Wedn.	30	♀ sets 10 h. 3 m.	23 12	3 12	1 35	♒	4 43	7 17	9 0

WORK FOR JUNE. May, June, and September are the *dairy months*. The best butter and the best cheese are usually made in these months. If you are not neat, you do not know how to make cheese or butter. Uncleanliness affects not only the looks, but the quality of butter. Broad, shallow glass pans are the best, but the most expensive. In these milk seldom turns sour in summer thunder-storms. Tin pans are good, but unless the dairy-woman is *scrupulously* neat, the seams will be filled with residum of milk and become very foul, giving a flavor to each successive pan-full. The principle requisites for prime butter are, good cows, good pasture for them, clean pans, cool, airy cellars, clean churns. Let the cream be churned before it is sour or bitter; and when the butter comes, at least three thorough workings will be necessary to drive out all the butter-milk.

GARDEN. Transplant flowers; destroy all weeds; get out cabbages; more lettuce; get ready celery trenches; layer favorite roses, vines, &c.; examine and remove from the peach tree root, the grub which is destroying them. Sow salt under plum trees:—put on a coat two inches thick.

Transplant flowers; bud roses with fine kinds; see that large plants are tied neatly to frames or stakes. Every morning examine your beds of cabbage, &c. for cut-worms, and destroy them if found; plant succession crops of peas, corn, radishes, lettuce, &c.

MOON'S PHASES.

	D.	H.	M.
Last Quar.	5	3	12 *M.*
New Moon,	12	6	8 *M.*

MOON'S PHASES.

	D.	H.	M.	
First Quar.	20	7	22	*M.*
Full Moon,	27	4	38	*E.*

For Kentucky, Ohio, Indiana, Illinois, and Missouri.

Days of Week.	D's of Month.	*VARIOUS PHENOMENA.*	Sun's de. N.	Sun Slow.	Moon South.	Decl.	Sun Rises.	Sun Sets.	Moon Rises.
			° ′	m. s.	h. m.		h. m.	h. m.	h. m.
Thurs.	1		23 8	3 24	2 39	♒	4 43	7 17	9 42
Fri.	2	☽ in perigee.	23 4	3 35	3 21	♓	4 44	7 16	10 21
Satur.	3	□ ☌ ☌	23 0	3 47	4 17		4 44	7 16	10 59
Sun.	4	Declar. of Independence, 1776.	22 55	3 58	5 9	♈	4 44	7 16	11 36
Mon.	5	☽ ☋.	22 49	4 8	6 1	♈	4 45	7 15	Morn.
Tues.	6		22 44	4 19	6 53	♉	4 45	7 15	0 15
Wedn.	7	Antares south, 9 h. 18 m.	22 33	4 20	7 46	♉	4 45	7 15	0 55
Thurs.	8	♄ rises, 10 h. 19 m.	22 31	4 38	8 40	♉	4 46	7 14	1 39
Fri.	9	Gen. Braddock's defeat, 1755.	22 24	4 48	9 35	□	4 46	7 14	2 26
Satur.	10	☽ runs high. □ ☌ ♅	22 17	4 47	10 20	□	4 47	7 13	3 17
Sun.	11	☿ greatest elongation *E.*	22 9	5 5	11 23	♋	4 47	7 13	4 12
Mon.	12	♀ sets, 9 h. 45 m.	22 1	5 13	ev. 14	♋	4 48	7 12	Sets.
Tues.	13		21 52	5 21	1 4	♌	4 48	7 12	7 57
Wedn.	14		21 44	5 28	1 51	♌	4 49	7 11	8 33
Thurs.	15		21 34	5 35	2 36	♌	4 49	7 11	9 7
Fri.	16	Antares south 8 h. 43 m.	21 25	5 41	3 20	♍	4 50	7 10	9 38
Satur.	17		21 15	5 47	4 2	♍	4 51	7 9	10 9
Sun.	18	☽ in apogee.	21 4	5 52	4 44	♎	4 51	7 9	10 39
Mon.	19	♄ south, 3 h. 12 m. ☽ ☌	20 54	5 56	5 27	♎	4 52	7 8	11 11
Tues.	20	♄ rises, 9 h. 31 m.	20 43	6 0	6 11	♎	4 53	7 7	11 44
Wedn.	21		20 32	6 4	6 57	♏	4 53	7 7	Morn.
Thurs.	22		20 20	6 6	7 45	♏	4 54	7 6	0 21
Fri.	23	☌ enters ♌.	20 8	6 9	8 36	♐	4 55	7 5	1 2
Satur.	24	☿ stationary. ♅ stationary.	19 55	6 10	9 30	♐	4 55	7 5	1 48
Sun.	25	♀'s greatest elong. *E.*	19 43	6 11	10 25	♑	4 57	7 4	2 40
Mon.	26		19 30	6 12	11 22	♑	4 57	7 3	3 39
Tues.	27		19 16	6 12	Morn.	♒	4 58	7 2	Rises.
Wedn.	28	Vega south, 10 h. 7 m.	19 3	6 11	0 19	♒	4 59	7 1	7 38
Thurs.	29		18 49	6 10	5 15	♓	4 59	7 1	8 19
Fri.	30	☽ in perigee.	18 34	6 8	2 10		5 0	7 0	8 50
Satur.	31	Saturn south, 2 h. 23 m.	18 20	6 5	3 4		5 1	6 59	9 37

WORK FOR JULY. Great difference of practice and opinion exists as to the methods and time of harvesting. Some cut their grass while the dew is on it; others cut it when perfectly dry, and say that if so cut it need not be spread, but will dry in the swath in one or two days. As to the *time* of cutting grass, we should avoid both extremes of very early or very late. Just before the seed of *timothy* is ripe, is, upon the whole, the best time for this best of grasses for the sythe. Clover should be cut when in full blossom; instead of spreading, the best farmers make it into small cocks and leave it there to cure, which it will do without shrivelling or losing its color.

GARDEN WORK. As soon as your roses are done blooming, if you wish to increase them, take the young shoots and about eight inches from the ground, cut, below an eye, half thro', and then slit upward an inch or two through the pith; put a bit of chip in to keep the slit open; bend down the branch and cover the portion thus operated on, with an inch or two of earth and put a brick upon it. It will soon send out roots, and by October may be separated from the parent plant. Quinces, gooseberries, and almost all shrubs, which branch near the ground may be propagated in this way. Still keep down weeds. Sow succession crops of corn, peas and salads, for fall use. Begin to gather such seeds as ripen early. Take up tulips, hyacinths, &c. as soon as the tops wither.

MOON'S PHASES.

	D.	H.	M.	
Last Quar.	3	8	29	*M.*
New Moon,	10	6	58	*E.*

MOON'S PHASES.

	D.	H.	M.	
First Quar.	18	11	31	*E.*
Full Moon,	26	0	39	*M.*

For Kentucky, Ohio, Indiana, Illinois, and Missouri.

Days of Week.	D's of Month.	*VARIOUS PHENOMENA.*	Sun's de. N. ° ′	Sun Slow. m. s.	Moon South. h. m.	Decl. ☉	Sun Rises. h. m.	Sun Sets. h. m.	Moon Rises. h. m.
Sun.	1	◐ ♌	18 5	6 2	3 57	♈	5 2	6 58	10 16
Mon.	2	☌ ☌ ◐	17 50	5 59	4 50	♈	5 3	6 57	10 56
Tues.	3		17 34	5 54	5 43	♉	5 4	6 56	11 39
Wedn.	4	♄ south, 2 h. 6 m.	17 18	5 50	6 37	♉	5 5	6 55	Morn.
Thurs.	5		17 2	5 44	7 31	□	5 6	6 54	0 25
Fri.	6	◐ runs high.	16 46	5 38	8 24	□	5 7	6 53	1 14
Satur.	7	Inferior, ☌ ☿	16 29	5 32	9 17	♊	5 7	6 53	2 6
Sun.	8		16 12	5 24	10 9	♊	5 8	6 52	3 1
Mon.	9	☌ rises 10 h. 20 m.	15 55	5 17	10 59	♋	5 9	6 51	3 58
Tues.	10		15 38	5 8	11 46	♋	5 10	6 50	Sets.
Wedn.	11	Vega south, 9 h. 12 m.	15 20	5 0	ev. 32	♋	5 11	6 49	7 7
Thurs.	12		15 2	4 50	1 16	♍	5 12	6 48	7 40
Fri.	13		14 44	4 40	1 59	♍	5 13	6 47	8 10
Satur.	14	◑ in apogee. ☌ ◐ ♀	14 26	4 30	2 41	♎	5 14	6 46	8 41
Sun.	15	◑ ♌	14 7	4 18	3 23	♎	5 15	6 45	9 12
Mon.	16		13 48	4 7	4 6	♎	5 16	6 44	9 40
Tues.	17	☿ stationary.	13 29	3 55	4 51	♏	5 18	6 42	10 19
Wedn.	18	♄ south, 1 h. 8 m.	13 10	3 42	5 37	♏	5 19	6 41	10 57
Thurs.	19	7 *s rise, 10 h. 20 m.	12 51	3 29	6 26	♐	5 20	6 40	11 40
Fri.	20		12 31	3 15	7 17	♐	5 21	6 39	Morn.
Satur.	21	◐ runs low.	12 11	3 1	8 10	♐	5 22	6 38	0 28
Sun.	22		11 51	2 46	9 6	♑	5 23	6 37	1 22
Mon.	23	○ enters ♍	11 31	2 31	10 2	♑	5 24	6 36	2 22
Tues.	24		11 10	2 15	10 59	♒	5 25	6 35	3 27
Wedn.	25	☿ greatest elong. west.	10 50	1 59	11 55	♒	5 26	6 34	4 36
Thurs.	26	☿ in aphelion.	10 29	1 43	Morn.	♓	5 27	6 33	Rises.
Fri.	27	♀ at gr. brilliancy.	10 8	1 26	0 51	♓	5 28	6 32	7 33
Satur.	28		9 47	1 9	1 46	♈	5 30	6 30	8 13
Sun.	29		9 26	0 51	2 42	♈	5 31	6 29	8 55
Mon.	30	☌ ☽ ☌	9 4	0 33	3 37	♉	5 32	6 28	9 38
Tues.	31	☿ in perihelion.	8 43	0 15	4 32	♉	5 33	6 27	10 23

WORK FOR AUGUST. If during this hot month you will clear out fence corners, and cut off vexatious intruders, the sun will do all it can to help you kill them. If your wheat is troubled with the weevil, thrash it out and leave it in the chaff. It will raise a heat fatal to its enemy without injuring itself. Every farmer should have a little nursery row of apple, pear, peach and plums of his own raising. Plant the seed; when a year old transplant into rows eight inches apart in the row and two feet between the rows. During July, August, and September, you may bud them with choice sorts, remembering that a *first-rate* fruit will live just as easily as a worthless sort. This is a good month to sow down fallow fields to grass. Plow thoroughly—harrow till the earth is fine; be liberal of seed, and cover in with a harrow and not with a bush, which drags the seeds into heaps, or carries them in hollows. The early part of the month should be improved by all who wish to put in a crop of buck-wheat or turneps. If your pastures are getting short, let your milch cows have something every night in the yard. Corn sown broadcast, would now render admirable service.

If you have neglected to raise your bulbs, lose no time now. Take cuttings from roses and put in small pots, invert a glass over them; in two or three weeks they will take root, and by the next spring make good plants. Gather flower seeds as soon as they ripen.

MOON'S PHASES.

	D.	H.	M.	
Last Quar.	1	3	44	*E.*
New Moon,	9	10	17	*M.*

MOON'S PHASES.

	D.	H.	M.	
First Quar.	17	1	51	*E.*
Full Moon,	24	8	55	*M.*

For Kentucky, Ohio, Indiana, Illinois, and Missouri.

Days of Week.	D's of Month.	*VARIOUS PHENOMENA.*	Sun's de. N. ° ′	Sun Slow. m. s.	Moon South. h. m.	Decl. S.	Sun Rises. h. m.	Sun Rises. h. m.	Moon Rises. h. m.
Wedn.	1	♂ south, 4 h. 1 m.	8 21	0 4	5 26	☐	5 34	6 26	11 12
Thurs.	2	☿ ☌ ♄	7 59	0 23	6 21	☐	5 35	6 24	Morn.
Fri.	3	◑ runs high.	7 37	0 42	7 14	♎	5 36	6 24	0 3
Satur.	4	Altair south, 8 h. 49 m.	7 15	1 1	8 6	♎	5 38	6 22	0 57
Sun.	5		6 53	1 21	8 56	♎	5 39	6 21	1 53
Mon.	6		6 31	1 40	9 43	♌	5 40	6 20	2 49
Tues.	7		6 8	2 0	10 29	♌	5 41	6 19	3 45
Wedn.	8		5 46	2 21	11 14	♍	5 42	6 18	4 40
Thurs.	9	☌ ☿ ◑.	5 23	2 41	11 57	♍	5 43	6 17	Sets.
Fri.	10	♀ stationary.	5 0	3 1	ev. 39	♍	5 45	6 15	6 43
Satur.	11	◑ in apogee. ◑ ☊	4 57	3 22	1 21	♎	5 46	6 14	7 14
Sun.	12		4 15	3 43	2 4	♎	5 47	6 13	7 46
Mon.	13		3 52	4 4	2 48	♍	5 48	6 12	8 19
Tues.	14		3 29	4 25	3 33	♍	5 49	6 11	8 56
Wedn.	15		3 5	4 46	4 20	♍	5 50	6 10	9 36
Thurs.	16	♂ south, 3 h. 15 m.	2 42	5 7	5 9	♐	5 52	6 8	10 21
Fri.	17	◑ runs low.	2 19	5 28	6 0	♐	5 53	6 7	11 11
Satur.	18	Fomalhaut south, 10 h. 59 m.	1 56	5 49	6 58	♑	5 55	6 6	Morn.
Sun.	19	Superior ☌ ☌ ☿	1 33	6 10	7 47	♑	5 55	6 5	0 7
Mon.	20	♄ south, 10 h. 45 m.	1 9	6 31	8 42	♒	5 56	6 4	1 7
Tues.	21		0 46	6 52	9 37	♒	5 58	6 2	2 12
Wedn.	22	♂ rises, 8 h. 1 m.	N. 23	7 13	10 33	♓	5 59	6 1	3 21
Thurs.	23	☌ enters ♎	S. 1	7 24	11 29	♓	6 0	6 0	4 31
Fri.	24	☽ in perigee. ♂ stationary ☽ ☊	0 24	7 55	Morn.	♈	6 1	5 59	Rises.
Satur.	25		0 48	8 16	0 25	♈	6 2	5 58	6 46
Sun.	26		1 11	8 36	1 22	♉	6 4	5 56	7 30
Mon.	27	☌ ☽ ♂	1 34	8 56	2 19	♉	6 5	5 55	8 16
Tues.	28	♄ south, 10 h. 11 m.	1 58	9 16	3 16	☐	6 6	5 54	9 6
Wedn.	29		2 21	9 36	4 13	☐	6 7	5 53	9 58
Thurs.	30		2 45	9 59	5 8	☐	6 8	5 52	10 52

WORK FOR SEPTEMBER. You should finish seeding your wheat grounds in this month. If sown too early it is liable to suffer from the fly; if too late, from rust. Those who sow akers by the hundred, must sow early and late both. But moderate fields should be seeded by the middle of this month. In preparing the land, if the surface does not naturally drain itself, it should be so plowed as to turn the water into furrows between each land. Standing water, and, yet more, ice upon it being fatal to it. See that your cattle are brought into good condition for wintering. Fall transplanting may be performed from the middle of this month; *take off every leaf*,—re-set, and stake.

By the latter part of the month, or early in October, according to the season, it will be necessary to raise and pot such plants as you intend to keep in the house; to raise and place in a dry and frost-proof room your dahlias, tuberoses, amarylis, tigridia, gladioli, and such other tender bulbs as you may have. Let your seed be gathered, carefully put away where it will contract no moisture. Go over your grounds and examine all your *labels*, lest the storms which are approaching, should destroy them. Sow in some warm and sheltered part of your garden, early in this month, for spring use, spinage, corn-salad, lettuce, &c. As soon as the leaves fall, take cuttings from currant bushes and grapes, and plant them out in rows. They will start off and grow earlier by some six weeks, the next season Fill in your celery trenches every ten days.

MOON'S PHASES.

	D.	H.	M.	
Last Quar.	1	2	6	*M.*
New Moon,	9	8	37	*M.*
First Quar.	17	2	11	*M.*

MOON'S PHASES. Continued—

	D.	H.	M.	
Full Moon,	23	6	6	*E.*
Last Quar.	30	4	26	*M.*

For Kentucky, Ohio, Indiana, Illinois, and Missouri.

Days of Week.	D's of Month.	*VARIOUS PHENOMENA.*	Sun's de. S. ° ′	Sun Fast. m. s.	Moon South. h. m.	Decl. S.	Sun Rises. h. m.	Sun Sets. h. m.	Moon Rises. h. m.
Fri.	1	☿ south, 2 h. 17 m.	3 8	10 15	6 2	♎	6 10	5 50	11 48
Satur.	2		3 31	10 34	6 53	♎	6 11	5 49	Morn.
Sun.	3	Inferior ☌ ☉ ♀	3 54	10 53	7 40	♌	6 12	5 48	0 44
Mon.	4		4 18	11 11	8 28	♌	6 13	5 47	1 40
Tues.	5		4 41	11 29	9 12	♍	6 14	5 46	2 35
Wedn.	6	♄ sets, 3 h. 9 m.	5 4	11 47	9 50	♍	6 16	5 44	3 30
Thurs.	7	Sirius rises, 0 h. 30 m.	5 27	12 4	10 38	♍	6 17	5 43	4 24
Fri.	8	☽ in apogee. ◐ ☊	5 50	12 21	11 20	♎	6 18	5 42	5 19
Satur.	9	♄ south, 9 h. 26 m.	6 13	12 37	ev. 3	♎	6 19	5 41	Sets.
Sun.	10	☌ ☉ ♅	6 30	12 53	0 46	♏	6 20	5 40	6 21
Mon.	11		6 58	13 8	1 31	♏	6 21	5 39	6 56
Tues.	12	7 *s south, 2 h. 17 m.	7 21	13 23	2 17	♏	6 23	5 37	7 35
Wedn.	13	☉ ☍ ♃.	7 44	13 38	3 5	♐	6 24	5 36	8 18
Thurs.	14	☿ south, 1 h. 16 m.	8 6	13 52	3 55	♐	6 25	5 35	9 6
Fri.	15	◐ runs low.	8 28	14 5	4 46	♑	6 26	5 34	9 58
Satur.	16		8 51	14 18	5 38	♑	6 27	5 33	10 55
Sun.	17		9 13	14 30	6 31	♑	6 29	5 31	11 56
Mon.	18		9 35	14 42	7 24	♒	6 30	5 30	Morn.
Tues.	19		9 56	14 53	8 18	♒	6 31	5 29	1 0
Wedn	20	7 *s south, 1 h. 46 m.	10 18	15 4	9 12	♓	6 32	5 28	2 8
Thurs.	21		10 40	15 14	10 7	♓	6 33	5 27	3 17
Fri.	22	♀ stationary. ◐ ♉	11 1	15 23	11 3	♈	6 34	5 26	4 27
Satur.	23	☉ ent. ♏. ◐ in perigee.	11 22	15 31	12 0	♈	6 35	5 25	Rises.
Sun.	24		11 43	15 39	Morn.	♉	6 37	5 23	6 4
Mon.	25	♀ rises, 3 h. 59 m.	12 4	15 47	0 59	♉	6 38	5 22	6 53
Tues.	26		12 25	15 53	1 57	□	6 39	5 21	7 45
Wedn.	27	◐ runs high.	12 45	15 59	2 59	□	6 40	5 20	8 41
Thurs.	28		13 5	16 4	3 52	♊	6 41	5 19	9 38
Fri.	29	♄ south, 8 h. 4 m.	13 25	16 8	4 45	♊	6 42	5 18	10 35
Satur.	30		13 45	16 12	5 36	♋	6 43	5 17	11 33
Sun.	31	☌ ☉ ☿	14 5	16 14	6 24	♋	6 44	5 16	Morn.

WORK FOR OCTOBER. Push forward your hogs as fast as possible. If they have had a good clover range in the summer, they will be ready to start off vigorously from the moment that you begin to put them upon corn. See that good paths are made in every direction from your house; and be sure to have walks through your barn-yards raised so high as never to be muddy. Your cattle yards should slope toward the center in such a way that horses and cattle need not wade knee deep in going in and out.

Frosts will now begin to strip your trees and stop the growth of garden shrubs, and all your preparations should be made for protecting tender trees and shrubs. For cherry and pear trees especially, you should provide good covering for their trunk, until they have grown quite large. A good bundle of corn-stocks set round the body so as to keep out the sun, but not the air, will answer every purpose. For beds of China and tea, and dwarf roses, we advise a covering of 3 inches of half-rotted dung. Cover this with leaves about six inches. Moss is better, if you will take the trouble to collect it; and straw will do if you have neither moss nor leaves. Half cover the part that remains exposed, with fine brush, or pine branches. For single plants, drive a stake by their side, and tie the plant to it; wind loosely about it a wisp of straw or roll of bass matting, or cloth, so as to exclude the sun and not the air. The *sun*, and not the *cold*, usually destroys plants.

MOON'S PHASES.

	D.	H.	M.	
New Moon,	7	9	41	*E.*
First Quar.	15	0	45	*E.*

MOON'S PHASES.

	D.	H.	M.	
Full Moon,	22	4	34	*M.*
Last Quar.	29	10	52	*M.*

For Kentucky, Ohio, Indiana, Illinois, and Missouri.

Days of Week.	D's of Month.	*VARIOUS PHENOMENA.*	Sun's de. S. ° ′	Sun Fast. m. s.	Moon South. h. m.	Decl. S.	Sun Rises. h. m.	Sun Sets. h. m.	Moon Rises. h. m.
Mon.	1		14 24	16 16	7 10	♌	6 45	5 15	0 29
Tues.	2		14 43	16 17	7 53	♍	6 46	5 45	1 24
Wedn.	3	☽ south, 11 h. 25 m.	15 2	16 17	8 36	♍	6 48	5 12	2 19
Thurs.	4	☾ in apogee. ☾ ☌ ♌	15 21	16 17	9 18	♎	6 49	5 11	3 13
Fri.	5	☿ 's greatest elongation.	15 39	16 15	10 1	●	6 50	5 10	4 7
Satur.	6	♀ rises 3 h. 23 m.	15 57	16 13	10 44	♎	6 51	5 9	5 1
Sun.	7	♃ stationary.	16 15	16 10	11 28	♏	6 52	5 8	Sets.
Mon.	8	♀ at greatest brilliancy.	16 33	16 6	ev. 14	♏	6 53	5 7	5 35
Tues.	9	7 *s south, 0 h. 27 m.	16 50	16 1	1 2	♐	6 54	5 6	6 17
Wedn.	10	♄ stationary.	17 7	15 55	1 51	♐	6 55	5 5	7 3
Thurs.	11	☾ runs low.	17 21	15 49	2 43	♐	6 56	5 4	7 54
Fri.	12	☽ south, 10 h. 39 m.	17 41	15 41	3 34	♑	6 57	5 3	8 49
Satur.	13	♀ rises, 3 h. 12 m,	17 50	15 33	4 26	♑	6 58	5 2	9 48
Sun.	14		18 13	15 24	5 18	♒	6 58	5 2	10 49
Mon.	15	☿ stationary.	18 28	15 14	6 10	♒	6 59	5 1	11 53
Tues.	16		18 40	15 4	7 2	♓	7 0	5 0	Morn.
Wedn.	17	♃ south, 4 h. 45 m.	18 58	14 52	7 51	♓	7 1	4 59	0 59
Thurs.	18	♂ south, 10 h. 9 m.	19 13	14 40	8 47	♈	7 2	4 58	2 7
Fri.	19		19 27	14 27	9 42	♈	7 3	4 57	3 15
Satur.	20	☾ in perigee.	19 41	14 13	10 39	♉	7 4	4 56	4 25
Sun.	21		19 54	13 58	11 38	♉	7 5	4 55	5 35
Mon.	22	☉ enters ♐	20 7	13 43	Morn.	□	7 5	4 55	Rises.
Tues.	23	7 *s south, 11 h. 28 m.	20 20	13 26	0 37	□	7 6	4 54	6 23
Wedn.	24	☽ runs high.	20 33	13 9	1 35	♊	7 7	4 53	7 21
Thurs.	25		20 45	12 51	2 32	♊	7 8	4 52	8 20
Fri.	26	Inferior ☌ ☉ ☿	20 56	12 33	3 26	♋	7 8	4 52	9 20
Satur.	27	♀ rises, 3 h. 6 m.	21 7	12 13	4 16	♌	7 9	4 51	0 18
Sun.	28	Advent Sunday.	21 18	11 53	5 4	♌	7 0	4 50	11 15
Mon.	29	□ ☉ ♄	21 29	11 31	5 50	♍	7 10	4 50	Morn.
Tues.	30		21 39	11 11	6 33	♍	7 11	4 59	0 10

WORK FOR NOVEMBER. During this month, if the ground is not locked by frost, you may plow stiff, tenacious clay soils to great advantage. By being broken up and subjected to the keen frosts, your soil will become mellow and tender. See that every provision is made for sheltering your cattle and horses; be sure that your sheep are not obliged to lie out in drenching rains.

IN THE GARDEN see that your asparagus bed is dressed if neglected last month. House all your brush, poles, stakes, frames, &c., which will be fit for use another season. If your tulips, hyacinths, &c. have not been planted, you had better reserve them for spring, as they will be liable to rot in the ground if planted so late in the year. Cover with brush, or leaves, or straw, your lettuce, spinage, and other salad plants designed for spring use. If tender plants, roses, vines, &c. have been left unprotected, cover as directed last month. If you have no cold frame for half-hardy plants, they may be *laid in by the heels*, i. e. taken up, and the roots laid into a trench, the tops sloping at an angle of about twenty degrees, and then covered with earth. The soil should cover about half the stem.

It is now a good season for cutting grafts. Take them from the outside of the middle of the tree; let them be done up in small packages, and set up end-ways in the cellar, and covered with about half-dry sand. Roots may be taken from pear and apple trees, and packed in the same way for root-grafting.

MOON'S PHASES.

	D.	H.	M.	
New Moon,	7	3	1	*E.*
First Quar.	14	9	56	*E.*

MOON'S PHASES.

	D.	H.	M.	
Full Moon,	21	4	38	*E.*
Last Quar.	29	8	18	*M.*

For Kentucky, Ohio, Indiana, Illinois, and Missouri.

Days of Week.	D's of Month.	*VARIOUS PHENOMENA.*	Sun's de. S. ° ′	Sun Fast. m. s.	Moon South. h. m.	☉ Decl. S.	Sun Rises. h. m.	Sun Sets. h. m.	Moon Rises. h. m.
Wedn.	1	♂ south, 9 h. 13 m.	21 48	10 40	7 25	♎	7 11	4 59	1 5
Thurs.	2	☽ in apogee. ☽ ☊	21 57	10 26	7 56	♎	7 12	4 48	1 59
Fri.	3	♂ stationary.	22 6	10 12	8 40	♎	7 13	4 47	2 53
Satur.	4	☿ rises 3 h. 9 m.	22 14	9 38	9 24	♏	7 13	4 47	3 48
Sun.	5	☿	22 22	9 13	10 10	♏	7 14	4 46	4 43
Mon.	6		22 30	8 45	10 57	♐	7 14	4 46	5 39
Tues.	7	♄ setts 11 h. 0 m.	22 37	8 22	11 47	♐	7 15	4 45	Sets.
Wedn.	8	☽ runs low.	22 43	7 56	ev. 35	♐	7 15	4 45	5 49
Thurs.	9		22 50	7 29	1 30	♑	7 15	4 45	6 43
Fri.	10	☿ s south, 7 h. 21 m.	22 56	7 2	2 23	♑	7 16	4 44	7 42
Satur.	11		23 0	6 34	3 15	♒	7 16	4 44	8 43
Sun.	12		23 5	6 6	4 7	♒	7 16	4 44	9 46
Mon.	13	♃ south, 1 h. 55 m.	23 10	5 38	4 58	♓	7 17	4 43	10 51
Tues.	14		23 13	5 9	5 49	♓	7 17	4 43	11 56
Wedn.	15	☽ ☌	23 17	4 40	6 40	♈	7 17	4 43	Morn.
Thurs.	16		23 20	4 11	7 33	♈	7 17	4 43	1 2
Fri.	17		23 22	3 42	8 27	♈	7 17	4 43	2 9
Satur.	18	☽ in perigee.	23 23	3 12	9 22	♉	7 18	4 42	3 16
Sun.	19		23 26	2 42	10 20	♉	7 18	4 42	4 24
Mon.	20		23 27	2 13	11 18	□	7 18	4 42	5 29
Tues.	21		23 27	1 43	Morn.	□	7 18	4 42	Rises.
Wedn.	22	☉ enters ♑	23 27	1 10	0 15	♋	7 18	4 42	6 62
Thurs.	23		23 27	0 42	1 12	♋	7 18	4 42	7 2
Fri.	24		23 26	F'st 13	2 5	♌	7 18	4 42	8 2
Satur.	25	♅ stationary.	23 25	Slo. 17	2 55	♌	7 18	4 42	9 1
Sun.	26		23 23	0 46	3 42	♍	7 18	4 42	9 58
Mond.	27		23 21	1 16	4 28	♍	7 17	4 43	10 54
Tues.	28		23 18	1 46	5 11	♍	7 17	4 43	11 49
Wedn.	29		23 16	2 15	5 53	♋	7 17	4 43	Morn.
Thurs.	30	☿ s south, 9 h. 7 m. ☽ ☊	23 11	2 44	6 36	♋	7 17	7 43	0 43
Fri.	31	☽ in apogee.	23 7	3 13	7 19	♌	7 16	4 44	1 38

DECEMBER. The year is about to close. Look back upon your toil. In what respects will your year's labor bear an approval when calmly examined? Can you honestly acquit yourself of indolence and carelessness? and as honestly take credit for enterprise, activity, and a desire for improvement? Your barns are full—your granary is heavy with grain—the year's bounty has followed a year's labor, and if you have the heart of a man you will not forget the source whence your blessings have come. You have perhaps done well by your stock, and in so far as the body is concerned, for your children; but what have you done for their education? What have you done to promote popular education? Are you doing any thing to make your neighhood better? What good newspapers do you provide for your family? Do you lay out as much money for books as you do for tobacco? In looking forward to the next year, you ought to mark out your personal course by good resolutions, and your business course by a definite plan of operations. It would be well if a farmer should know before hand every thing he means to do; and afterwards, if he has kept such an account that you can tell any thing that you have done.

Sleighing for the young and gay, and warm fire-sides for the aged, are what are now most thought of. Those who are best provided with the comforts of life should remember their less favored brethren.

PLANTING.

A Table showing the number of Plants required for one Acre of Land, from one foot to twenty-one feet distance from Plant to Plant.

Distance.		Number of Plants.	Distance.		Number of Plants.	Distance.		Number of Plants.
Feet.	Inches.		Feet.	Inches.		Feet.	Inches.	
1	0	43,560	6	0	1,210	12	0	302
1	6	19,360	6	6	1,031	13	0	258
2	0	10,890	7	0	889	14	0	223
2	6	6,969	7	6	775	15	0	194
3	0	4,840	8	0	680	16	0	171
3	6	3,556	8	6	602	17	0	151
4	0	2,722	9	0	538	18	0	135
4	6	2,151	9	6	482	19	0	121
5	0	1,742	10	0	436	20	0	109
5	6	1,440	11	0	361	21	0	99

Legal rates of Interest in the different States and Territories.

STATES.	RATE OF INTEREST.	PUNISHMENT OF USURY.
Maine,	6 per cent	Forfeit of the debt and claim.
N. Hampshire,	6 per cent	Forfeit of three times the amount unlawfully taken.
Vermont,	6 per cent	Recovery in an action, with costs.
Massachusetts,	6 per cent	Forfeit of threefold the usury.
Rhode Island,	6 per cent	Forfeit of the usury and interest on the debt.
Connecticut,	6 per cent	Forfeit of the whole debt.
New York,	7 per cent	Usurious contracts void.
New Jersey,	6 per cent	Forfeit of the whole debt.
Pennsylvania,	6 per cent	Forfeit of the whole debt.
Delaware,	6 per cent	Forfeit of the whole debt.
Maryland,	6 per cent	On tobacco contracts, 8 per centum. Usurious contracts void.
Virginia,	6 per cent	Forfeit double the usury taken.
N. Carolina,	6 per cent	Contracts for usury void—forfeit double the usury.
S. Carolina,	7 per cent	Forfeit of interest, and premium taken, with costs to debtor.
Georgia,	8 per cent	Forfeit three times the usury, and contracts void.
Alabama,	8 per cent	Forfeit of interest and usury.
Mississippi,	8 per cent	By contract as high as 10. Usury recoverable in action of debt.
Louisiana,	5 per cent	Bank interest 6; conventional, as high as 10; beyond, contract void.
Tennessee,	6 per cent	Usurious contracts void.
Kentucky,	6 per cent	Usury may be recovered, with costs.
Ohio,	6 per cent	Usurious contracts void.
Indiana,	6 per cent	Penalty of usury, a fine of double the excess.
Illinois,	6 per cent	By agreement, as high as 12 per centum; if beyond, forfeit three fold amount of the whole interest.
Missouri,	6 per cent	By agreement, as high as 10 per centum; if beyond, forfeit of whole interest due, and of the usury taken.
Michigan,	7 per cent	Forfeit of the usury taken, and one fourth the debt.
Arkansas,	6 per cent	By agreement, any rate not exceeding 10; amount of usury recoverable, but contracts void.
Dist. Columbia,	6 per cent	Usurious contracts void.
Florida,	8 per cent	Forfeit of interest and excess, in case of usury.
Wisconsin,	7 per cent	By agreement, not exceeding 12; forfeit treble the excess.
Iowa,	7 per cent	By agreement, as high as 12; forfeit treble the excess.

☞ On debts or judgments in favor of the United States, interest is computed at the rate of 6 per centum per annum.

KITCHEN PEPPER. Ginger one lb.; cinnamon, black pepper, allspice, and nutmegs, of each eight oz.; cloves one oz.; dry salt six lbs. Grind together. Useful to flavor graveys, stuffings, &c.

A TABLE FOR MANURING LAND.

EXPLANATION. The following Table is intended as a guide in ascertaining the distance and size of the heaps proper for expending a given number of loads per acre, or *vice versa*. In the left-hand columns is placed the distance of the rows and of the heaps in each row; and at the top of the columns will be noticed the number of heaps intended to be made of each load. The point where the two meet gives the number of loads per acre, which will be required for that purpose.

Example 1. Required the number of loads necessary to manure an acre of ground, dividing each load into six heaps, and placing them at a distance of four and a half yards from each other? The answer by the Table is 39¾.

Example 2. A farmer has a field containing five and a half acres, over which he wishes to spread a mixen containing 82 loads of dung. Now 82 divided by 5½ gives 15 loads per acre; and by referring to the Table it will be seen that the desired object may be accomplished by making four heaps of a load, and placing them nine yards apart; or by nine heaps at six yards, as may be thought most advisable.

DISTANCE OF THE HEAPS.	NUMBER OF HEAPS IN A LOAD.									
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
3 yards,	538	269	179	134	108	89½	77	67	60	54
3½ yards,	395	198	132	99	79	66	56½	49½	44	39½
4 yards,	303	151	101	75½	60½	50½	43½	37¾	33½	30½
4½ yards,	239	120	79½	60	47¾	39¾	34½	30	26½	24
5 yards,	194	97	64½	48½	38¾	32¼	27¾	24¼	21½	19½
5½ yards,	160	80	53½	40	32	26¾	22¾	20	17¾	16
6 yards,	134	67	44¾	33½	27	22½	19½	16¾	15	13½
6½ yards,	115	57½	38¼	28¾	23	19	16½	14¼	12¾	11½
7 yards,	99	49½	33	24¾	19½	16½	14	12¼	11	10
7½ yards,	86	43	28¾	21½	17¼	14¼	12¼	10¾	9½	8½
8 yards,	75½	37¾	25¼	19	15¼	12½	10¾	9½	8½	7½
8½ yards,	67	33½	22¼	16¾	13½	11¼	9½	8¼	7½	6¾
9 yards,	60	30	20	15	12	10	8½	7½	6¾	6
9½ yards,	53½	26¾	18	13½	10¾	9	7¾	6¾	6	5½
10 yards,	48½	24¼	16¼	12	9¾	8	7	6	5½	4¾

NUTRITIVE VALUE OF VARIOUS SUBSTANCES.

Table showing the average quantity of nutritive matter in 1000 parts of several varieties of Animal and Vegetable food.

Blood,	215	Carrots,	98
Beef,	260	Turnips,	42
Veal,	250	Cabbage,	73
Mutton,	290	Beet Root,	148
Pork,	240	Strawberries,	100
Brain,	200	Pears,	160
Chicken,	270	Apples,	170
Cod,	210	Gooseberries,	190
Haddock,	180	Cherries,	250
Sole,	210	Plums,	290
Bones,	510	Apricots,	260
Milk,	72	Peaches,	200
White of Eggs.	140	Grapes,	270
Wheat,	950	Melons,	20
Rice,	880	Cucumbers,	25
Barley,	920	Tamarind,	240
Rye,	792	Almonds,	650
Oats,	742	Morels,	896
Potatoes,	260		

The above table represents the relative proportion of solid digestible matter contained in 1000 parts of the different articles of food which are enumerated.

The nutritive matter of wheat is chiefly starch and gluten, and in this species of grain the gluten is in much greater relative proportion to the starch than in barley, oats, or rye. In rice there is little else than starch. There can be little doubt that the great value of wheat as an article of food depends upon the excess of gluten, which is a nitrogenous substance, and has not inaptly been termed the vegeto-animal principle.

MERCANTILE TIME TABLE, for conveniently finding the Maturity of Bills and Notes. *Directions.* To find, for example, the maturity of a Note at 90 days, dated June 4th, being the 155th day of the year; add thereto the term of the Note and three days of grace, say 93 days, and the total is 248 days, which indicates Friday, the 5th September, as the time. ☞ S, in the Table, indicates the Sundays in each month.

Index to days of the month.	January, 1	February, 2	March, 3	April, 4	May, 5	June, 6	July, 7	August, 8	September, 9	October, 10	November, 11	December, 12
1	1	32	60	91	121	S	182	213	244	274	305	335
2	2	S	S	92	122	153	183	214	245	275	S	336
3	3	34	62	93	123	154	184	S	246	276	307	337
4	4	35	63	94	S	155	185	216	247	277	308	338
5	S	36	64	95	125	156	186	217	248	S	309	339
6	6	37	65	S	126	157	S	218	249	279	310	340
7	7	38	66	97	127	158	188	219	S	280	311	S
8	8	39	67	98	128	S	189	220	251	281	312	342
9	9	S	S	99	129	160	190	221	252	282	S	343
10	10	41	69	100	130	161	191	S	253	283	314	344
11	11	42	70	101	S	162	192	223	254	284	315	345
12	S	43	71	102	132	163	193	224	255	S	316	346
13	13	44	72	S	133	164	S	225	256	286	317	347
14	14	45	73	104	134	165	195	226	S	287	318	S
15	15	46	74	105	135	S	196	227	258	288	319	349
16	16	S	S	106	136	167	197	228	S	289	S	350
17	17	48	76	107	137	168	198	S	260	290	321	351
18	18	49	77	108	S	169	199	230	261	291	322	352
19	S	50	78	109	139	170	200	231	262	S	323	353
20	20	51	79	S	140	171	S	232	263	293	324	354
21	21	52	80	111	141	172	202	233	S	294	325	S
22	22	53	81	112	142	S	203	234	265	295	326	356
23	23	S	S	113	143	174	204	235	266	296	S	357
24	24	55	83	114	144	175	205	S	267	297	328	358
25	25	56	84	115	S	176	206	237	268	298	329	359
26	S	57	85	116	146	177	207	238	S	299	330	360
27	27	58	86	S	147	178	S	239	270	300	331	361
28	28	59	87	118	148	179	209	240	271	301	332	S
29	29	S	88	119	149	S	210	241	272	302	333	363
30	30	S	S	120	150	181	211	242	273	303	S	364
31	31	S	90	S	151	S	212	S	S	304	S	365

List of Foreign Currencies fixed by Law.*

Pound sterling of Great Britain,	$4 84†	Florin of Trieste,	$ 48
Franc of France,	18‡	Florin of Prussia,	46
Franc of Belgium,	18‡	Florin of Leipsic,	48
Louis d'or, or rix-dollar of Bremen,	78¾	Rixdollar of Batavia,	75
Thaler of Prussia,	68½	Rixdollar of Leghorn,	90
Florin, or guilder of Holland,	40	Rixdollar of Sweden,	1 05
Mark banco,	35	Rixdollar of Saxony,	69
Denmark rixdollar,	1 00	Livre of Cayenne, seven to a dollar.	
Livre of France,	18¾	Livre of Leghorn and Florence, 6¼ to a dollar.	
Milrea of Madeira,	1 00	Livre of Switzerland,	27
Milrea of Azores,	83¾	Livre of Genoa,	18¾
Milrea of Portugal,	1 12	Crown of Tuscany,	1 05
Rouble of Russia,	75	Current mark of Hamburgh,	28
Spanish real of plate,	10	Ducat of Naples,	80
Spanish real of vellon,	5	Pound, Halifax currency,	4 00
Tale of China,	1 48	Pound, Jamaica currency,	5 00
Rupee of British India,	44½	Ounce, Sicily,	2 40
Florin, or guilder of Augsburg,	48	Scudes, Malta,	40
Florin of Brabant,	34	Turkish piastre,	5
Florin of Creveld,	40	Pezza of Leghorn,	90
Florin of St. Gaul,	40‖		

* See acts of Congress, March 3, 1843.
† Worth, without abrasion, according to the mint valuation, $4 87 7-120th.
‡ Or, exactly, seven hundred and three one-thousandths of a cent.
‖ Or, exactly, thirty-six one-hundredths of a cent.

Times of holding State Elections.

States.	*Seats of Government.*	*Times of holding Elections.*	*Legislature meets.*
Maine,	Augusta,	2d Monday in September,	1st Wednes. in Jan.
New Hampshire,	Concord,	2d Tuesday in March,	1st Wednes. in June.
Vermont,	Montpelier,	1st Tuesday in September,	2d Thurs in October.
Massachusetts,	Boston,	2d Monday in November,	1st Wednes. in Jan.
Rhode Island,	Providence & Newport,	1st Wednesday in April,	1st Wednes. in May.
Connecticut,	Hartford and N. Haven,	1st Monday in April,	1st Wednes. in May.
New York,	Albany,	Tuesday after 1st Mon. in Nov.	1st Tuesday in Jan.
New Jersey,	Trenton,	Tuesday after 1st Mon. in Nov.	1st Monday in Jan.
Pennsylvania,	Harrisburgh,	2d Tuesday in October,	1st Monday in Jan.
Delaware,	Dover,	2d Tuesday in November,	1st Wednes. in Decem.
Maryland,	Annapolis,	1st Wednesday in October,	Last Monday in Dec.
Virginia,	Richmond,	3d Thursday in April,	1st Monday in Dec.
North Carolina,	Raleigh,	1st Thursday in August,	3d Monday in Novem.
South Carolina,	Columbia,	2d Monday in October,	4th Monday in Nov.
Georgia,	Milledgeville,	1st Monday in October,	1st Monday in Novem.
Alabama,	Tuscaloosa,	1st Monday in August,	1st Monday in Decem.
Mississippi,	Jackson,	1st Monday in November,	1st Monday in Jan.
Louisiana,	New Orleans,	1st Monday in July,	1st Monday in Jan.
Tennessee,	Nashville,	1st Thursday in August,	1st Monday in Octob.
Kentucky,	Frankfort,	1st Monday in August,	1st Monday in Dec.
Ohio,	Columbus,	2d Tuesday in October,	1st Monday in Dec.
Indiana,	Indianapolis,	1st Monday in August,	1st Monday in Dec.
Illinois,	Springfield,	1st Monday in August,	1st Monday in Dec.
Missouri,	Jefferson City,	1st Monday in August,	3d Monday in Novem.
Michigan,	Detroit,	1st Monday in November,	1st Monday in Jan.
Arkansas,	Little Rock,	1st Monday in October,	- - - - - - -
Florida,	Tallahassee,	4th Monday in May,	4th Monday in June.

All the States but South Carolina, choose Electors by a popular vote.

☞ The Presidential Electors of each State are hereafter, according to an act of Congress, to be chosen uniformly on the Tuesday following the first Monday in November.

TABLE

Showing the number of Days from any date in one Month to the same date in any other Month.

For the Year 1847.	To January.	To February.	To March.	To April.	To May.	To June.	To July.	To August.	To September.	To October.	To November.	To December.
From January, . .	365	31	59	90	120	151	181	212	243	273	304	334
From February, . .	334	365	28	59	89	120	150	181	212	242	273	303
From March, . . .	306	337	365	31	61	92	122	153	184	214	245	275
From April, . . .	275	306	334	365	30	61	91	122	153	183	214	244
From May, ...	245	276	304	335	365	31	61	92	123	153	184	214
From June, ...	214	245	273	304	334	365	30	61	92	122	153	183
From July, ...	184	215	243	274	305	325	365	31	62	92	123	153
From August, . . .	153	184	212	243	273	304	334	365	31	61	92	122
From September, . .	122	153	181	212	242	273	303	334	365	30	61	91
From October, . . .	92	123	151	182	212	243	273	304	385	365	31	61
From November, . .	61	92	120	151	181	212	242	273	304	334	365	30
From December, . .	31	62	90	121	151	182	212	243	274	304	335	365

Directions. To find the number of days, for example, from the 5th of June to the 5th December: Look for June in the left hand index, and following it to the angle indicated by December in the index at the top, the number given is 183.

For *different dates* in each month, *add* or *subtract* the *difference of time*—for example: the number of days from 5th June to 10th December is required—the difference is 5 days more than to the 5th December, which added to the sum already found to the 5th December, 183, makes the sum desired 188—and so from 5th of June to 1st December, the difference is 4 days less, which subtracted from 183, leaves 179 days as the time required.

LUCERNE.

This admirable plant is very little known in the west. It resembles a clover, and is used for green food for cattle, for which it is peculiarly adapted both by its nutriciousness and its endurance of repeated cuttings. Care must be taken to put it upon the right soil and it will bear mowing four or five times a year, and will last for ten years—with care five years more! The soil for it is a *deep*, a very deep vegetable loam, which drains itself perfectly and yet without becoming dry. It has a fusiform root, which, as the plant grows older, extends downward from four to six feet. The subsoil is regarded by Flemish farmers as of more importance than the surfacesoil. A stiff cold clay, a wet and springy soil; a hard, cold, wet subsoil of any sort, is unfavorable to it. It should therefore be tried on warm, dry, and rich soils, than which none are better than our sandy alluvions or bottom lands. During its first year it requires some care, to keep down weeds, as it is easily smothered; but when once established it rules the soil in defiance of anything. If the ground is *very* clean, it may be sown broadcast; but it is always safer and often *necessary* to drill it. Authors vary as to the quantity of seed required per aker, Von Thaër says six to eight pounds, while his French editor says from sixteen to eighteen. We suppose that from ten to twelve pounds will be a fair amount.

When the plants are well established they will be improved by a severe harrowing every spring; a sharp harrow being used until the field looks as if it were plowed.

Lucerne has been tried by a few cultivators in the west, but by more in the east, with great success, and it has this peculiar excellence, that, thanks to its very long roots, it withstands our severest drouths; indeed, our hottest and dryest summers are those which it seems to delight in.

HOT-BEDS.

After a little practice any one can make and manage a simple hot-bed. For a common family one 12 by 4 feet will be large enough, and 9 by 4 will answer for a small family. *Frame.* The frame should be made of two inch stuff, (pine or poplar.) The back must be as high again as the front, in order to give the right inclination to the sash. The ends should be nailed fast to corner posts, say four inches square. The back and front are to be attached to these parts by iron bolts, which may be screwed or unscrewed at pleasure. The frame may be taken to pieces, if so made, and put away during the season it is not in use. A frame 12 by 4, will take four sash of three feet wide, the other sized frame will take three sash. Where the sash meet, a piece of wood three inches broad and two thick, should be let in from back to front, for the sash to run upon, and it may be allowed to extend back for two feet beyond the body of the frame Three coats of paint should be put on the outside and inside of the frame, and then, with good care, it will last twenty years.

Hot-Bed. Mark out the ground six inches larger every way than your frame. Dig it out a foot deep. Take fresh, strong horse-dung. Shake it up and mix it thoroughly. Lay it into the bed evenly, beating it down with the back of the fork, *but never treading it.* Raise the bed three feet above the surface, making the thickness in all four feet. In a week's time this will have settled six or eight inches. We have for the sake of a gentler and longer continued heat, laid alternate layers of manure and *tan-bark*, and thus far it has done well with us. Put on the frame and sash and let stand till the heat begins to raise, which will be two or three days. Then raise the sash to let the steam pass off. In about four days take off the frame, put on about six inches of light, good soil, evenly, all over the bed; re-place the frame, and in a day thereafter it will be ready for seed.

Cabbage, cauliflowers, tomatoes, egg plants, peppers, celery, cucumbers, lettuce, together with savory herbs, as sweet majoram, sweet basil, thyme, sage, lavender, &c. &c., may be sown in drills in the soil prepared as above.

It is difficult to give, on paper, the directions for the care of the bed. The greatest dangers of all, are that of *burning* the plants by excessive heat, or of damping them off, by too little air. These evils must be guarded against by the admission of as much air as possible. In mild days let the sash be partly open all day, and in very cold days, endeavor to procure a half hour even, at mid-day, for raising the sash and airing the plants. As they grow up, if crowded, they should be thined out, so as not to run up spindling.

ORIGINAL RECEIPTS.

When we say *original*, we don't mean that no one ever employed the same receipts, but only this, that we have obtained them, not from books, but from good and skilful housewives.

EPICURE'S CORN-BREAD.—Upon two quarts of sifted corn-meal, pour just enough boiling water to scald it thoroughly; if too much water is used it will be heavy. Stir it thoroughly, let it get cold; then rub in a piece of butter as large as a hen's egg, together with two tea-spoonsful of fine salt; beat four eggs thoroughly, and they will be all the better if the whites and yolks are beaten separately, add them to the meal and mix thoroughly. Next, add a pint of sour cream, or butter-milk, or sour milk, (which stand in the order of their value.) Dissolve two tea-spoonsful of saleratus in hot wa-

ter, and stir it in. Put it in buttered pans and bake it.

In winter, it may be mixed over night and in that case, the eggs and saleratus should not be put in until morning. When ready for the oven, the mixture ought to be about as thin as good *mush*, and if not, more cream should be added.

If you are not an epicure already, you will be in danger of becoming one, if you eat much of this corn cake—*provided it is well made.*

Sugar Ginger-bread.—To three quarters of a pound of butter, not quite a pint of finely rolled brown sugar, add a great spoonful of ginger, and a little cinnamon and nutmeg; beat these up to a foam; beat four eggs thoroughly and add and mix well, with the butter and sugar. Add a tea cup of rich cream, a great spoonful of saleratus dissolved in hot water. Stir in sifted flour as long as it can be worked. Pound and knead the dough very thoroughly. Roll out quite thin, cut into small cakes, bake in a quick oven. They will be hard, but tender and crisp.

Hoosier Biscuit.—Add a tea-spoonful of salt to a pint of new milk, warm from the cow. Stir in flour until it becomes a stiff batter; add two great spoonsful of lively brewers' yeast; put it in a warm place and let it rise just as much as it will. When well raised, stir in a tea-spoonful of saleratus dissolved in hot water. Beat up three eggs, (two will answer,) stir with the batter, and add flour until it becomes tolerably stiff dough; knead it thoroughly, set it by the fire until it begins to rise, then roll out, cut to biscuit form, put in pans, cover it over with a thick cloth, set by the fire until it raises again, then bake in a quick oven. If well made, no directions will be needed for eating.

As all families are not provided with scales and weights, referring to the ingredients generally used in cakes and pastry, we subjoin a list of weights and measures.

WEIGHT AND MEASURE.

Wheat flour	one pound	is one quart.
Indian meal	one pound 2 ounces,	is one quart.
Butter, when soft	one pound 1 ounce,	is one quart.
Loaf-sugar, broken	one pound	is one quart.
White sugar pow'd	one pound 1 ounce,	is one quart.
Best brown sugar	one pound 2 ounces,	is one quart.
Eggs	ten eggs	are one pound.

LIQUID MEASURE.

Sixteen large table spoonfuls	are	half a pint.
Eight large table spoonfuls	are	one gill.
Four large table spoonfuls	are	half a gill.
A common sized tumbler holds		half a pint.
A common sized wine glass holds		half a gill.

Allowing for accidental differences in the quality, freshness, dryness, and moisture of the articles, we believe this comparison between weight and measure to be as nearly correct as possible.

COOKING VEGETABLES.

While we believe meat to be necessary to laboring men, we are equally sure that it is used to excess; for persons of a sedentary habit, vegetable diet is supposed to be much more wholesome, because much less stimulating than meat. Whatever shall make vegetables more relishful will extend their popular use, and therefore any *simple* receipe for cooking them is a public good. The following are taken fresh from the kitchen, and we will vouch for their being good, although there may be other ways still better.

1. *Greens.* The articles employed for greens are numerous; we merely mention the following:—sprouts of turnep and cabbage, dandelions, lamb's quarters, red-rooted plantain, cowslip, wild pepper-grass, purslane, young beet-tops, lettuce, and spinage,—the best of all greens.

In gathering plantain, care must be taken to select *only* the red-rooted, the white being thought poisonous. With the exception of spinage, all these should be boiled in salted water, or in water with a piece of salt pork, for half an hour, then taken out, drained, and served up with butter gravy.

Spinnage is boiled, as above, for half an hour, then taken out, thoroughly drained, put into a skillet with cream, butter and pepper, and if need be, a little more salt. Place it over the fire and stir it up with a knife all the time it simmers, until it becomes a paste. About five minutes are enough for this last process—then dish and serve it.

2. *Asparagus.* Asparagus should never be cut *below the surface of the ground*, although books and papers, almost universally, direct to the contrary. The white part of the stem is always tough and inedible. Let it spring up about six or eight inches and then cut it *at* the surface of the ground. Lay it in the pan or kettle in which it is to be cooked, and sprinkle salt over it. Pour boiling water over it, until it is just covered; boil from fifteen to twenty-five minutes, according to the age of the asparagus. Have two or three nicely toasted slices of bread in the dish which is to go to the table; lay the asparagus upon the toast, putting first sweet butter and pepper upon it according to your taste; lastly pour over it the liquor in which it was boiled. Many throw away the water in which it was cooked and substitute cream and butter, but thereby the finest flavor of the vegatable is thrown away and lost.

3. *Beets.* While young, beets may be boiled top, and all; as the tops get tough the root alone is boiled in salted water until tender, viz; from three quarters of an hour to an hour and a half,

according to the size of the beet. Quarter or slice them if large, and add fresh sweet butter and pepper.

4. *Peas.* No vegetable depends more for its excellence upon good cooking than peas. Have them freshly gathered and shelled, *but never wash them.* If they are not perfectly clean, roll them in a dry cloth: but even this is seldom required, and then only through carelessness. Pour them dry into the cooking dish, and put as much salt over them as is required, then pour on boiling water enough to cover them; boil them fifteen minutes if they are young; no pea is fit to cook which requires more than half an hour's boiling. When done put to a quart of peas three great table spoonfuls of butter and pepper to your taste. Put all the water to them in which they were boiled. The great mistakes in cooking peas are in cooking too long, and in deluging them with water.

String or snap beans are cooked like peas, only they require longer boiling.

5. *Corn*, Should be boiled in salted water from 20 to 30 minutes, according to its age—if boiled longer it becomes hard and loses its flavor. We have given in the Western Farmer & Gardener, p. 231, a receipt for corn and beans, but as all may not see that periodical, we extract the substance of it.

We give directions for a mess sufficient for a family of six or seven.

To about half a pound of salt pork add three quarts of cold water; let it boil. Now cut off three quarts of green corn from the cobs, set the corn aside and put *the cobs* to boil with the pork, as they will add much to the richness of the mixture.—When the pork has boiled, say half an hour, remove the cobs and put in one quart of freshly-gathered, green, shelled beans; boil again for fifteen minutes; then add the three quarts of corn and let it boil another fifteen minutes. Now turn the whole out into a dish, add five or six large spoonfuls of butter, season it with pepper to your taste, and with salt also, if the salt of the pork has not proved sufficient. If the liquor has boiled away, it will be necessary to add a little more to it before taking it away from the fire, as this is an essential part of the affair.

6. *Salsify or Oysterplant.* — This vegetable is raised exactly as are carrots and parsneps. Like the latter they require a little frosting before their flavor is fully developed.

They should be scraped and washed, (but *not* soaked in vinegar, as English cooks direct, to extract a bitter taste, which they do *not* contain) and sliced; sprinkle enough salt upon them to season them, pour on just enough boiling water to cover them; boil till perfectly tender, which will be, say, fifteen minutes. Put butter and pepper to them; stir up a little flour in cream to make a thin paste and pour in enough to thicken a little the water in which they were boiled. Dish with or without toasted bread, as may suit the taste.

7. *Tomatoes.* — The receipe which we gave in the Farmer and Gardener has been universally copied and, we believe, and has beguiled thousands to the love of tomatoes. It has been introduced to cook-books under the name of "Indiana Recipe for Cooking Tomatoes."

8. *Onions*, should be boiled for half an hour in salted water. then drained, put into sweet milk, boiled again for five or ten minutes, seasoned with butter, pepper and salt, and served up.

9. *Pie-plant.* This important vegetable—among the earliest, the most wholesome, and of the easiest culture—should be found in every garden, and served up on every table during the spring and early summer. To prepare it for use, strip off the skin, slice it thin, put into a dish with a few spoonsful of boiling water, just enough to keep from sticking, for its own juice will afford liquid enough after it is cooked. Boil until it is perfectly tender, stirring it constantly. If the plant is good and the fire quick, it ought to be boiled in five minutes. Stir in all the sugar needed while it is in a scalding state. A little nutmeg or lemon peel, put in while it is hot, improves the flavor. When cool, it may be used for tarts, or pies, with or without upper crust; it also makes a better *apple*-sauce than apples do themselves.

10. *Egg-plant.* Boil in salted water a few minutes; cut slices, put a little salt between each slice, and let them lie for half an hour. Then fry them in butter or lard until they are brown.

11. *Cauliflower and Broccoli.* The only difference between these, so far as the cook is concerned, is in color. Take off the outside leaves and soak them for an hour in salted water. Pour boiling water to them and boil for about twenty minutes. Serve them up with butter and pepper. The savoy cabbages are next in delicacy of flavor to the cauliflower, and may be cooked in the same way.

A HOLE IN THE POCKET. If it were not for these holes in the pocket, we should all be rich. A pocket is like a cistern, a small leak at the bottom is worse than a large pump at the top. God sends *rain* enough every year, but it is not every man that will take pains to catch it; and it is not every man that catches it who knows how to keep it.

A LIST OF CHOICE FRUITS.

Our readers may desire a list of fruits, which are universally admitted to be of first-rate excellence. We cannot include, of course, *all* that are first-rate; but we put none in that are not so.

I. APPLES.

I. Summer.
Red or Carolina June.
Summer Queen.
Yellow Hoss.
Sweet Bough.
Prince's Harvest.
Kirkbridge White.
Sweet June.
Daniel.

II. Autumn.
Maiden's Blush.
Wine.
Holland Pippin.
Rambo.
Fall Harvey.
Gravenstein.
Ashmore.
Porter.

III. Winter.
Black.
Golden Russet.
Newtown Spitzenberg.
Rhode Island Greening.
Hubbardston Nonsuch.
Vandeveer Pippin.
Yellow Belle Fleur.
White. " "
Michael Henry Pippin.
Pryor's Red.
Green Newtown Pippin.
Jenetan or Rawle's Janet.
Putnam Russet.

II. PEARS.

I. Summer Pears, *or such as ripen from the first of July to the last of August.*

1. Madaleine, or Citron des Carmes.
2. Bloodgood.
3. Summer Francreal.
4. Dearborn's Seedling.
5. Julienne.
6. Williams' Bon Chretien.

II. Autumn Pears, *or such as ripen from September to the last of November.*

7. Steven's Genesse.
8. Belle Lucrative.
9. Henry the Fourth.
10. Washington.
11. Dunmore.
12. St. Ghislain.
13. Seckel.
14. Beurre Bosc.
15. Andrews.
16. Marie Louise.
17. Doyenne or fall butter.
18. Dix.
19. Petre.
20 Duchesse D'Angouleme.

III. Winter Pears, *or those which ripen during the winter and spring months.*

21. Beurre Diel.
22. Hacon's Incomparable.
23. Passe Colmar.
24. Beurre Ranz.
25. Columbia.
26. Beurre D'Aremberg.
27. Van Mons Leon le Clerc.
28. Beurre Easter.
29. Chaumontelle.
30. Glout Morceau.
31. Prince's St. Germain.
32. Winter Nelis.

Those who wish only *four* trees, may select Nos. 2, 6, 20, 26. Those who have room for *eight*, to the above may add 13, 23, 25, 32. Those who wish sixteen trees, to the above may add, 1, 3, 11, 14, 18, 21, 24, 28.

III. PEACHES.

I. Early.
1. Red Magdalen.
2. Early Royal George.
3. Early York.
4. Morris' Red Rareripe.
5. Crawford's Early Melacaton.

II. Medium.
6. Apricot Peach.
7. Baltimore Rose.
8. Swalsh.
9. Noblesse.
10. Coolidge's Favorite.
11. Malta.
12. Brevoort,
13. Douglass.
14. Grosse Mignonne.

III. Late.
15. Heath.
16. Crawford's late Melacaton.
17. Lemon Cling.
18. La Grange.

IV. APRICOTS.

1. Large Early.
2. Breda.
3. Peach Apricot.
4. Moorpark.

V. CHERRIES.

1. Bauman's May or Bigarreau de Mai.
2. Black Eagle.
3. Knight's Early Black.
4. May Duke.
5. Elton.
6. Bigarreau, or Spanish Yellow.
7. Belle de Choisey.
8. Black Tartarian.
9. Downer's Late.
10. Napoleon.

For a collection of two trees, 4, 9; for four trees, add 6 and 10.

VI. PLUMS.

1. Green Gage.
2. Jefferson.
3. Huling's Superb.
4. Coe's Golden Drop.
5. Purple Gage.
6. Crugar's Scarlet.
7. Washington.
8. Red Gage.
9. Smith's Orleans.
10. Royal de Tours.

For two trees, 1 and 4; for four add 2 and 7.—The following are said to be suitable for light sandy soils, on which plums usually drop their fruit: Cruger's Scarlet, Imperial Gage, Red Gage, Coe's Golden Drop, Bleeker's Gage, Blue Gage.

VII. STRAWBERRIES.

Early Virginia.
Hovey's Seedling.
Hudson.
Ross Phœnix.

No one man can make out a list that will suit all; and those who are acquainted with fruits will reject some from the above list and insert others. But it may be safely said, that he who has in his collection the above varieties, will have a collection comprising the best that are known, and without one inferior sort, although there may be many others *as* good; which may be added by such as have room for them.

MIXING PAINT: AND LAYING IT ON.

It is convenient, and, oftentimes on the score of economy, necessary for persons (who have not been apprenticed to the trade,) to do their own painting. To enable such to practice with success, we propose giving a few hints.

RESPECTING THE ARTICLES USED.

White Lead. This is extensively manufactured at Cincinnati, Pittsburgh, St. Louis, and at several other places in the west. Low priced leads are always adulterated by *chalk*, or, as it is called in its prepared state, *whiteing*. It is sometimes so largely mixed with this, as to be worthless, and every one has observed houses, painted for a year or so, from which the paint rubs off like whitewash, in consequence of the use of adulterated lead. The poorest lead is sold *without any brand*. The common article is branded as No. 1, with the makers name. The best article is branded with the maker's name, as Pure, or Superior. It is the best economy always to use the pure lead.

Oil. Linseed oil is that usually employed in painting. It contains a large amount of fatty substance and of other impurity, which should be separated from it before it is used. *This is to be done by boiling.* For outside work, the oil should *always be boiled*, no matter what the painter says about it. Great care should be taken in doing this. Let the kettle be set out of doors, the heat be increased gradually, but never enough to produce violent boiling, as the oil will expand, run over, and take fire; when nothing can save it, or the house either, oftentimes, if you have been foolish enough to do it within doors. As fast as impurities rise to the surface, skim them off—when the oil has a clear look, slack off the fire and let the oil cool; carefully turn off the clear portion, leaving the *sediment* undisturbed.

Dryers. Substances used to make paint dry quickly, are called *Dryers.* For light work sugar of lead is the best; for colored paint, litharge and and red lead are employed. Spirits of turpentine is used for the same purpose. Litharge and red lead are usually boiled in with the oil at the rate of about a quarter of a pound of litharge to a gallon of oil.

MIXING AND LAYING ON.

Paint is purchased in kegs, containing twenty-five pounds of lead ground in oil, and ready for mixing. The kegs themselves make excellent paint-pots. The lead is to be mixed according to the work to be done. If paint is laid on in heavy coats it will crack and peal off. If several thin coats are successively laid on, it forms a solid body. The first coat is called *priming.* The lead is made quite thin with oil for priming. Before laying it on, let the work be cleaned, all dust and dirt be removed. The surface is then covered evenly with the paint, and allowed to dry thoroughly.

Second coat. Let nail holes, cracks, &c., be filled with putty; for colored painting, red-lead putty is the best. The paint should be mixed to the thickness of thin cream, and laid on *evenly*, but not in too great quantities. In nice work, after this coat has thoroughly dried, it should be rubbed down with pumice stone or fine sand paper. The third coat is to be laid on as was the second. Three coats, at least, are required for good painting. Four or five will be still better.

Paint mixed with boiled oil usually has a glossy appearance. If it is desired to increase this, small portions of varnish are added. This is usually confined to outside work.

In cities the glossy surface of paint, is dis-esteemed for inside work; and instead, a *flatted* white is laid on. This is produced by mixing the lead for the last coat with turpentine instead of oil, by which a dull white is made. Flatted colors are not susceptible of being cleaned by washing more than once or twice, whereas common paint will endure washing, if carefully performed, for years.

If painting is *well done*, and the paint is of the best materials, it ought to last twenty years. But the trash too often daubed upon buildings, does not last five years.

White will keep its color best for out side work. Some tint is thought to be more agreeable for inside work. Much judgement is required in preparing colored or tinted paints; and verbal directions can not well be given for it in any moderate space. The usual pigments employed in making up the tints most in fashion, are, for Gray—white lead, Prussian blue, ivory black, and lake, or Venitian red; for *pea* and *sea greens*—white, Prussian blue, and yellow; for *Olive green*—white Prussian, blue, umber, and yellow ochre; for *Fawn color*—burned terra sienna, umber, and white.

We add two receipts taken from an English work, for a cheap paint for inside walls.

"*Milk Paint.*—A paint has been used on the Continent with success, made from *milk* and *lime*, that dries quicker than oil paint, and has no smell. It is made in the following manner: Take fresh curds and bruise the lumps on a grinding-stone, or in an earthen pan, or mortar, with a spatula or strong spoon. Then put them into a pot with an equal quantity of lime, well slacked with water, to make it just thick enough to be kneaded. Stir this mixture without adding more water, and a white coloured fluid will soon be obtained, which will serve as a paint. It may be laid on with a brush with as much ease as varnish, and it dries very speedily. It must, however, be used the same day it is made, for if kept till next day it will be too thick: consequently no more must be mixed up at one time than can be laid on in a day. If any colour be required, any of the ochres, as yellow ochre, or red ochre, or umber, may be mixed with it in any proportion. Prussian blue would be changed by the lime. Two coats of this paint will be sufficient, and when quite dry it may be polished with a piece of woolen cloth, or similar substance, and it will become as bright as varnish. It will only do for inside work; but it will last longer if varnished over with white of egg after it has been polished."

"*The following receipt for milk paint* is given in 'Smith's Art of House Painting:' Take of skimmed milk nearly two quarts; of fresh-slacked lime about six ounces and a half; of linseed oil four ounces, and of whiting three pounds; put the lime into a stone vessel, and pour upon it a sufficient quantity of milk to form a mixture resembling thin cream; then add the oil, a little at a time, stirring it with a small spatula; the remaining milk is then to be added, and lastly the whiting. The milk must on no account be sour. Slack the lime by dipping the pieces in water, out of which it is to be immediately taken, and left to slack in the air. For fine white paint the oil of caraway is best, because

colourless; but with ochres the commonest oils may be used. The oil, when mixed with the milk and lime, entirely disappears, and is totally dissolved by the lime, forming a calcareous soap. The whiting or ochre is to be gently crumbled on the surface of the fluid, which it gradually imbibes, and at last sinks: at this period it must be well stirred in. This paint may be coloured like distemper or size-colour, with levigated charcoal, yellow ochre, &c., and used in the same manner. The quantity here prescribed is sufficient to cover twenty-seven square yards with the first coat, and it will cost about three halfpence a yard. The same paint will do for outdoor work by the addition of two ounces of slacked lime, two ounces of linseed oil, and two ounces of white Burgundy pitch: the pitch to be melted in a gentle heat with the oil, and then added to the smooth mixture of the milk and lime. In cold weather it must be mixed warm, to facilitate its incorporation with the milk."

We add several receipts for various convenient kinds of paint to be employed in particular situations, and for special purposes.

"*A coating to preserve wood in damp situations* may be made by beating twelve pounds of resin in a mortar, and adding to it three pounds of sulphur and twelve pints of whale oil. This mixture must then be melted over a fire, and stirred well while it is melting. Ochre of any required colour, ground in oil, may be put to it. This composition must be laid on hot, and when the first coat is dry, which will be in two or three days, a second coat may be given; and a third, if necessary."

"*Gas tar*, with yellow ochre, makes a very cheap and durable green paint for iron rails and coarse woodwork."

"*Composition to lay on a boarded building, to resist the weather, and likewise fire.*—Take one measure of fine sand, two measures of wood ashes well sifted, three of slacked lime ground up with oil, and mix them together; lay this on with a brush, the first coat thin, the second thick. This adheres so strongly to the boards covered with it, that it resists an iron tool, and the action of fire, and is impenatrable by water."

"*A flexible paint for canvass* is made by stirring into fifty-six pounds of common oil paint a solution of soap lye, made of half a pound of soap and three pounds of water: it must be used while warm."

"*A black colouring for garden walls* may be made by mixing quicklime, lampblack, a little copperas, and hot water."

CEMENT FOR FLOORS. For cellars, smoke-houses, meat-houses, &c. &c, it is often desirable to have a cement floor, rat-proof. The following recipe was procured by J. S. Skinner, from Col. Totten, of the U. S. Engineer Department:

The mortar is to be made of one part of sand to one-half part of hydraulic cement, measured in rather stiff paste. Then one part mortar, thoroughly mixed, is to be used with two and a half parts broken stone or bricks, the largest pieces not exceeding four ounces in weight, or of gravel of similar sizes, or of oyster shells, or of either or all of these mixed together. These coarse materials must be free from sand or dirt. The concrete thus made, must be put down in a layer of not more than six inches, which will be about the proper thickness for the floor; rammed very hard, and until the coarse particles are driven out of sight; care being taken to bring the top of the mass into the true place of the floor by the first process; no subsequent addition of plaster being admissible. By the help of a straight edge drawn over guide pieces, the top surface may be made smooth and even by the first operation.

The concrete should contain no more water than is necessary to give the requisite plasticity to the mass. The floor should be covered as soon as finished, with straw or hay, which should be kept wet for several days, the longer the better.

CHEAP PAINT.—An Ontario farmer gives the following recipe for a cheap paint. He says he has tried it on brick, and prefers it to oil paint, and says it will last longer on rough siding of wood than oil paint will on plain siding of boards.

Take one bushel of unslacked lime, and slack it with cold water; when slacked, add fifty pounds of Spanish whiting, seventeen pounds salt, and thirteen pounds sugar. Strain the mixture thro' a wire sieve, and it will be fit for use, after reducing it with cold water. In order to give it a good color, three coats are necessary on brick, and two on wood. It may be put on with a brush similar to whitewash. Each coat must have sufficient time to dry before the next is applied.

For painting inside walls, take as before, one bushel of unslacked lime, three pounds sugar, five pounds salt, and prepare as above.—*Gen. Farmer.*

SUMMARY RULES FOR USING MANURE.

The following is a summary of the general rules to be observed in manuring and improving soils:—Never to use animal manure and quicklime together, as the one will destroy the other. To use lime as a manure only in very moist peaty soils, or in soils which have been injured by want of drainage, and a superabundance of manure. To take care that lime, when applied, is mixed intimately with the soil, and not laid on the surface to be washed in by the rain. To remember that rotten manure is considered to give solidity; and that unfermented manure, buried in trenching, has a tendency to lighten the soil. To dilute liquid manure from a dug-hill with water before applying it to growing plants; as otherwise, from the quantity of ammonia that it contains it will be apt to burn them. To remember that the manure of cows and all animals that chew the cud, is cold and suited to a light soil; and that the manure of horses, pigs, and poultry is hot and suited to a firm soil: also that all manure, when new, may be considered as hot, from the heat that will be engendered during the process of fermentation; and that when well rotten, it becomes cold in its nature, and should be treated accordingly. To remember that all mixed soils are more fertile than soils consisting only of one of the three primitive earths, viz, lime, sand, or clay; and never to forget that too much manure is quite as injurious to plants as too little.

MISCELLANY.—*Bacon* is supposed to derive its name from the circumstance of the animal feeding most usually in England upon beech-mast, which in Anglo-Saxon is called *bucon*.

GRAFTING-CLAY AND GRAFTING-WAX.—Common grafting-clay is made with any kind of stiff clay mixed with a fourth part of fresh horse-dung free from litter, and a portion of cut hay; a little water is sprinkled on the mass, and the whole is beaten together several times a-day for about a week, till the ingrediants are thoroughly amalgamated The common French grafting-clay, or Onguent de Ste Fiacre, is composed of equal parts of stiff clay and cow-dung; but a superior kind recommended by M. De Candolle, is composed of one pound of cow-dung, half a pound of pitch, and half a pound of yellow wax. Grafting-wax is generally made of equal parts of turpentine, bees-wax, and resin, with a little tallow, melted together, and thoroughly incorporated. This is thinly spread on pieces of coarse cotton, and used in strips like cerecloth. In grafting trees that have a soft and delicate bark, fine moss and cotton wool tied on with ligatures of bast mat, are better than anything else, and they are generally quite sufficient for every purpose in which grafting is employed by ladies. A new composition has been lately invented, made with caouchouc, which is said to be very efficacious, but I have never seen it tried.

The essential points to be attended to in grafting are —choosing a stock and a scion that correspond in nature and in habits of growth; cutting the parts to be united so as to fit exactly, and leave no vacuity between; taking care that the soft wood of the scion shall always rest on the soft wood of the stock, as it is between these parts that the union is to be effected; binding the parts closely together, and covering them so as to prevent them from becoming so dry as to shrink apart, in which case the vessels would wither and become incapable of uniting.

Use of Grafting and Budding.—The obvious use of grafting is to propagate varieties that cannot so easily be continued by seed, and that will not strike by cuttings. There is, however, another use nearly as important; and this is to make plants, flowers and fruit sooner than they would otherwise do. There are many plants that only flower at the extremity of their shoots; and these plants, when tender, would require enormous plant-houses before they would be thrown into flower or fruit. To remedy this inconvenience, a method has been devised of cutting off the tips of the shoots and grafting them; and then, after they have grown for sometime, cutting off the tips again and regrafting them, by means of which flowers are at length produced on plants of quite a small size. The same method is applied in Paris to exotic fruit-trees, to throw them into fruit; and it has been tried with success with the rose-apple (Eugenia Jambos,) the mango, &c. In common nurseries, the fruit of new seedling apples is obtained much sooner by grafting their shoots on common apple stocks, than by leaving the young plants to nature; and this plan is also practised at Brussels by Prof. Van Mons, to test his seedling-pears.

TO TAKE THE HONEY WITHOUT DESTROYING THE BEES. In the dusk of the evening, when the bees are quietly lodged, approach the hive, and turn it gently over. Having steadily placed it in a small pit, previously dug to receive it, with its bottom upward, cover it with a clean new hive, which has been properly prepared, with a few sticks across the inside of it, and rubbed with aromatic herbs. Having carefully adjusted the mouth of each hive to the other, so that no aperture remains between them, take a small stick, and beat gently round the sides of the lower hive for about ten minutes or a quarter of an hour, in which time the bees will leave their cells in the lower hive, ascend, and adhere to the upper one. Then gently lift the new hive, with all its little tenants, and place it on the stand from which the other hive was taken. This should be done some time in the week preceding mid-summer day, that the bees may have time, before the summer flowers have faded, to lay in a new stock of honey, which they will not fail to do, for their subsistence thro' the winter.—*Cooley's Cylo. of Prac. Receipts.*

STRUCTURAL BOTANY,

Applied to Horticulture---Transplantation.

Transplantation consists in removing a plant from the soil in which it is growing to some other soil.

If in the operation the plant is torpid, and its spongioles uninjured, the removal will not be productive of any interruption to the previous rate of growth.

And if it is growing, or evergreen, and the spongioles are uninjured, the removal will produce no further injury than may arise from the temporary suspension of the action of the spongioles, and the non-cessation of perspiration during the operation.

So that transplantation may take place at all seasons of the year, and under all circumstances, provided the spongioles are uninjured.

This applies to the largest trees as well as to the smallest herbs.

But as it is impossible to take plants out of the earth without destroying or injuring the spongioles, the evil consequences of such accidents must be remedied by the hindrance of evaporation.

Transplantation should therefore take place only when plants are torpid, and when the respiratory organs (leaves) are absent; or, if they never lose those organs, as evergreens, only at seasons when the atmosphere is periodically charged with humidity for some considerable time.

Old trees in which the roots are much injured form new ones so slowly, that they are very liable to be exhausted of sap by the absorption of their very numerous young buds before new spongioles can be formed.

The amputation of all their upper extremities is the most probable prevention of death; but in most cases injury of their roots is without a remedy.

Plants in pots being so circumstanced that the spongioles are protected from injury, can, however, be transplanted at all seasons, without any dangerous consequences.

On the subject of transplantation much difference of opinion exists, particularly as to the most favorable period of performing this operation. Lindley has several pages of argument in favor of transplanting in the autumn as soon as the fall of the leaf indicates a recession of the sap, and of course a stillness of vegetation. I have planted many trees in England and agree with him that November and December are the most preferable months—but it is not clear that the same arguments are true in this climate.

Trees are not generally taken up with the same care here as there, and even if they were, the roots and small fibres are still usually much wounded and injured. If transplanted in September or October just previous to the frost entering the ground, there is not time for these injuries to heal before the action of the severe frosts of our winters,

which is sure to penetrate to them as the earth is loosened all round by transplanting; this action of the frost on the lacerated roots must of course be in many cases fatal. Again in March and April, particularly the former, the most drying winds of the year prevail in England, which is unfavorable to transplantation as increasing the evaporation. Here the earth in those months is usually extremely moist from the melting of the snow, &c. Hence it would appear that these months are more favorable for the operation of transplantation here than in England—and it seems probable that there is less chance of failure in this climate by transplanting early in the spring than in the autumn; still I have now before me several trees transplanted in November which have stood this severe winter, and are now in full leaf and beauty. Also the spongioles of the roots of trees transplanted in autumn are better settled in the earth, absorb the juices quicker and develop their foliage earlier and more abundantly than those moved in the spring; therefore there is a gain of time. From these considerations it may be more correct to transplant all hardy trees and those very tenacious of life in the autumn; immediately after the first frost, but all tender trees as pears, peaches, &c., it is safer to transplant in the spring. Evergreens, as the fir, Arbor vitæ, &c., are better moved in the spring also.

With respect to the age of the tree when transplantation should take place, there is no doubt that young trees are the best even for immediate beauty and effect. In moving a large tree great expense and care are requisite, and even then it is probable that considerable pruning must take place to restore the equilibrium between the roots and the branches, by which operation the tree remains an unsightly object for years, and probably does not recover its original size before a young tree would produce nearly the same effect, the young one remaining a beautiful object all the time.

Therefore except in cases of extremely rare specimens, it is better to abandon the idea of transplanting old trees.

Many plants of Rhododendron maximum and Magnolia glauca are annually brought in the spring from their native spots in this vicinity for sale; the purchasers generally select the largest and finest, of course the oldest specimens, for which the highest price is paid. They then wonder they will not grow. If such were planted in a moist shady spot and headed down, they might have a fair chance of surviving, but yonger plants would be far preferable.

Hardy herbaceous plants, the ornament of the open garden in summer, if kept in pots can be transplanted at any time of the year. The nurserymen who would make a practice of keeping them in this state, would sell many to their summer visiters, who are delighted with the specimens seen in flower, but afterwards forget them.

MANURES.

This subject is difficult to reduce to the few observations permitted by the size of this work.

The purpose of manure is to supply those juices and gases to the roots of plants, of which the soil has been exhausted by their previous action—and in proportion to the quantity of this supply will plants acquire luxuriance or remain weak. Plants differ however in their capacity of thriving on manure. Vines, roses, and others can scarcely ever be too much manured—the pine family will hardly bear any—the cacti, which naturally vegetate on rocks and in sand, will if manured attain an excessive vigorous growth. The variety of manures and their useful application to different plants are almost infinite.

Loamy clay absorbs heat slowly, retains moisture so tenaciously as to prevent drainage, and is so compact as to hinder the passage of the young spongioles of the root through it. Yet mixed with a large quantity of sand, peat, lime and manure, it becomes valuable; its capability of retaining moisture enabling it to hold the solutions of the peat, lime, and manure until gradually used by the roots, which valuable solutions would quickly run through a light sandy soil without clay, before the roots had time to absorb them.

Silex or the component part of sand, when dissolved by the potash, soda, or other alkaline properties of manure, enters into the tissue of many plants, and largely into all grassy plants; it is supposed to be the chief cause of the stiffness or rigitity of the stem—hence it is valuable as a manure; it also lightens heavy clayey soils. Calcareous earth or lime also enters in appreciable quantity into many plants in the shape of oxalate or phosphate of lime—bone manure now so much used is phosphate of lime. The salts of potash and soda are likewise found in abundance in plants, hence, besides the power possessed by these and some other salts of dissolving various substances found in the earth so as to make them fit juices for absorption by roots, they themselves are valuable manures in the shape of common salt (muriate of soda) salt petre, (nitrate of potash) &c., but they should be applied in small quantities. Ulmin or geine, a peculiar substance resulting chiefly from vegetable decomposition and existing in abundance in peat and in common manure, has lately been brought into notoriety in the geological reports of different States, and represented as the essential part of manure, without a supply of which to vegetables all fruit will fail.

Much direct experiment is still wanting to ascertain the true value and operations of this substance. The small knowledge hitherto possessed on the subject is however rather in favor of the theory.

Those who consider the chemical constituents of a soil as the sole tests of its value for the growth of plants, will be much in error in practice.

Minerals and metals or rather their oxides exist in plants—as sulphur in the cruciferous family, particularly in mustard, copper in coffee, wheat, and many other plants, iron in tobacco, gold in the sage, &c., but these can only be taken up by the roots as solutions of their oxides, nothing solid being able to pass through the spongioles.

Some manures sensibly affect the colors of flowers as is well known to the tulip growers, even a moderate quantity of manure spoils all their favorite stripes. The change of the pink color of hydrangia into purple is probable produced by some manure containing excess of alkali.

The following statement of the strength of man-

ures on oats, rye, and barley, is extracted by Decandolle from Hermstadt (*Annalen der Landmissenschaft*, Annals of Agriculture.)

	Rye.	Barley.	Oats.
Sheeps dung on,	13 fold.	16 fold.	14 fold.
Goats "	13	15	15
Horse "	11	13	14
Cow "	9	11	16
Human fæces	13	13	14¼
Pigeons "	9	10	12
Human urine,	13	13	13
Dry bullocks blood,	14	16	12½
Vegetable earth,	6	7	13
Unmanured soil,	4	4	5

These trials were under exactly equal circumstances, but it would have been more satisfactory had the experiment been tried under all equal circumstances except the quality of the natural soil, which should have varied in particulars of composition, tenacity, silicious, calcareous and other natural admixtures.

The refuse from sugar refineries has been considered a powerful manure, particularly from those where animal charcoal are burnt and pulverized bone is used in the process—and this refuse has been carried at great expense from the refineries at St. Petersburg to the South of France for the purpose of manuring the vinyards. It consists of carbon and phosphate of lime in exceedingly minute division, also of vegetable mucilage, the vegetable coloring matter of sugar which is probably carbon in another state, and a portion of saccharine juice.

The carbon may be converted into carbonic acid and received into a plant for the purpose of being afterwards decomposed and depositing its carbon there, the phosphate of lime we know from the action of bone manure is very powerful, and in this case is so very finely divided that its action must be rapid. Of the effect of the mucilage, I am ignorant, whether being vegetable it is capable of being converted into geine or not, but I suspect not, as it resembles the substance thrown off by the roots; the saccharine juice is in sufficient abundance to create the strongest fermentation and heat, so much so that the boards with which a vessel was lined inside while carrying a cargo of this refuse from St. Petersburg to Marseilles were completely converted through and through into charcoal. There is no doubt therefore that it is a most effective manure, but it requires great caution in the use, and to be mixed with a large quantity of earth previous to application, otherwise its heat will completely destroy vegetation. One injurious effect it produced however was to excite the vines so extensively that when it was impossible to obtain this stimulus none other could be found to supply its place, and the vines fell into a stare of weakness.

It has lately been subjected to fermentation for the purpose of manufacturing vinegar from it previous to its application to the soil. This of course by abstracting the saccharine juice, leaving a portion of acetic acid in the mass, and perhaps in destroying in some measure the phosphate of lime, much impairs its quality as a manure.

On the much discussed question of the comparative value of manure applied fresh from the stable, or applied after it has lain in a heap for some months and fermented, it appears that exposure to rain dissolves the salts it contains, which are lost by washing away, and the heat of fermentation disipates the gasses in the atmosphere. Both these are of value to the roots of plants.

On the other hand, on the the theory of geine, the fermentation of manure, kept in a heap, decomposes the vegetable substance and converts it into geine, which is thus in a fit state for immediate application to the roots, while manure, if spread over the earth in a fresh state, does not heat at all and decomposes very slowly, a great portion of the gasses being also lost.

The application of liquid manure to plants, particularly those grown in pots or tubs, is considerably practiced, and certainly with great advantage. This liquid manure is usually prepared by steeping manure in water and drawing it off when clear, and of the color of beer or porter. The The above argument applies also to this method.

The substances found in plants by analysis are by no means true tests that those substances are required as manure to make them flourish; thus there may be very little lime found in a vegetable on analysis, and yet lime as phosphate, (bone manure) carbonate, (common lime) or even sulphate (gypsum) may be a useful manure for that vegetable—for lime neutralizes acids which may be found in the soil, many of which are injurious; it decomposes and prepares various other substances, as mucilage or gum which readily dissolves and alters phosphate of lime, thus the hurtful exudations of roots partly possessing this mucilaginous nature may perhaps thereby be rendered innocuous or useful, &c. There is indeed perhaps as much or more yet to be discovered on this subject than what we actually know.

Man sows and cultivates many acres of the same plant together, hence arises the necessity of manure and rotation. Nature mixes all her plants in varied and beautiful profusion—hence, no manure or rotation is necessary, the exudations of the roots of one plant become food for another, and the same plants remain growing on the same spots for years, nay ages. Yet when nature does, as in the case of forests, produce the same tree to a large extent—the American forests teach us that their rotation also becomes necessary. It would be a curious experiment to endeavor to ascertain whether the exudations of parasitical plants were beneficial or otherwise to the trees on which they are *said* to feed.

Teschemacher's Elements of Hort.

Depend on Yourself.—The editor of the Albany Knickerbocker is a sensible man. There is more truth than poetry in the following, which we copy from his spicy paper:

Bad luck as well as mischance and misfortune, are all the daughters of misconduct, and sometimes the mother of success, prosperity and advancement. To be thrown on one's resources is to be cast into the very lap of fortune. Had Franklin entered Philadelphia with a thousand dollars in his pocket, instead of one shilling and ninepence, as he did, in all probability he would have gone on a "spree" instead of hunting up employment, and died at thirty-five from driving tandem teams and drinking brandy-smashers, in-

which is sure to penetrate to them as the earth is loosened all round by transplanting; this action of the frost on the lacerated roots must of course be in many cases fatal. Again in March and April, particularly the former, the most drying winds of the year prevail in England, which is unfavorable to transplantation as increasing the evaporation. Here the earth in those months is usually extremely moist from the melting of the snow, &c. Hence it would appear that these months are more favorable for the operation of transplantation here than in England—and it seems probable that there is less chance of failure in this climate by transplanting early in the spring than in the autumn; still I have now before me several trees transplanted in November which have stood this severe winter, and are now in full leaf and beauty. Also the spongioles of the roots of trees transplanted in autumn are better settled in the earth, absorb the juices quicker and develop their foliage earlier and more abundantly than those moved in the spring; therefore there is a gain of time. From these considerations it may be more correct to transplant all hardy trees and those very tenacious of life in the autumn; immediately after the first frost, but all tender trees as pears, peaches, &c., it is safer to transplant in the spring. Evergreens, as the fir, Arbor vitæ, &c., are better moved in the spring also.

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Those who consider the chemical constituents of a soil as the sole tests of its value for the growth of plants, will be much in error in practice.

Minerals and metals or rather their oxides exist in plants—as sulphur in the cruciferous family, particularly in mustard, copper in coffee, wheat, and many other plants, iron in tobacco, gold in the sage, &c., but these can only be taken up by the roots as solutions of their oxides, nothing solid being able to pass through the spongioles.

Some manures sensibly affect the colors of flowers as is well known to the tulip growers, even a moderate quantity of manure spoils all their favorite stripes. The change of the pink color of hydrangia into purple is probable produced by some manure containing excess of alkali.

The following statement of the strength of man-

utes on oats, rye, and barley, is extracted by Decandolle from Hermstadt (*Annalen der Landmisenschaft*, Annals of Agriculture.)

	Rye.	Barley.	Oats.
Sheeps dung on,	13 fold.	16 fold.	14 fold.
Goats "	13	15	15
Horse "	11	13	14
Cow "	9	11	16
Human fæces	13	13	14½
Pigeons "	9	10	12
Human urine,	13	13	13
Dry bullocks blood,	14	16	12½
Vegetable earth,	6	7	13
Unmanured soil,	4	4	5

These trials were under exactly equal circumstances, but it would have been more satisfactory had the experiment been tried under all equal circumstances except the quality of the natural soil, which should have varied in particulars of composition, tenacity, silicious, calcareous and other natural admixtures.

The refuse from sugar refineries has been considered a powerful manure, particularly from those where animal charcoal are burnt and pulverized bone is used in the process—and this refuse has been carried at great expense from the refineries at St. Petersburg to the South of France for the purpose of manuring the vinyards. It consists of carbon and phosphate of lime in exceedingly minute division, also of vegetable mucilage, the vegetable coloring matter of sugar which is probably carbon in another state, and a portion of saccharine juice.

The carbon may be converted into carbonic acid and received into a plant for the purpose of being afterwards decomposed and depositing its carbon there, the phosphate of lime we know from the action of bone manure is very powerful, and in this case is so very finely divided that its action must be rapid. Of the effect of the mucilage, I am ignorant, whether being vegetable it is capable of being converted into geine or not, but I suspect not, as it resembles the substance thrown off by the roots; the saccharine juice is in sufficient abundance to create the strongest fermentation and heat, so much so that the boards with which a vessel was lined inside while carrying a cargo of this refuse from St. Petersburg to Marseilles were completely converted through and through into charcoal. There is no doubt therefore that it is a most effective manure, but it requires great caution in the use, and to be mixed with a large quantity of earth previous to application, otherwise its heat will completely destroy vegetation. One injurious effect it produced however was to excite the vines so extensively that when it was impossible to obtain this stimulus none other could be found to supply its place, and the vines fell into a stare of weakness.

It has lately been subjected to fermentation for the purpose of manufacturing vinegar from it previous to its application to the soil. This of course by abstracting the saccharine juice, leaving a portion of acetic acid in the mass, and perhaps in destroying in some measure the phosphate of lime, much impairs its quality as a manure.

On the much discussed question of the comparative value of manure applied fresh from the stable, or applied after it has lain in a heap for some months and fermented, it appears that exposure to rain dissolves the salts it contains, which are lost by washing away, and the heat of fermentation disipates the gasses in the atmosphere. Both these are of value to the roots of plants.

On the other hand, on the the theory of geine, the fermentation of manure, kept in a heap, decomposes the vegetable substance and converts it into geine, which is thus in a fit state for immediate application to the roots, while manure, if spread over the earth in a fresh state, does not heat at all and decomposes very slowly, a great portion of the gasses being also lost.

The application of liquid manure to plants, particularly those grown in pots or tubs, is considerably practiced, and certainly with great advantage. This liquid manure is usually prepared by steeping manure in water and drawing it off when clear, and of the color of beer or porter. The The above argument applies also to this method.

The substances found in plants by analysis are by no means true tests that those substances are required as manure to make them flourish; thus there may be very little lime found in a vegetable on analysis, and yet lime as phosphate, (bone manure) carbonate, (common lime) or even sulphate (gypsum) may be a useful manure for that vegetable—for lime neutralizes acids which may be found in the soil, many of which are injurious; it decomposes and prepares various other substances, as mucilage or gum which readily dissolves and alters phosphate of lime, thus the hurtful exudations of roots partly possessing this mucilaginous nature may perhaps thereby be rendered innocuous or useful, &c. There is indeed perhaps as much or more yet to be discovered on this subject than what we actually know.

Man sows and cultivates many acres of the same plant together, hence arises the necessity of manure and rotation. Nature mixes all her plants in varied and beautiful profusion—hence, no manure or rotation is necessary, the exudations of the roots of one plant become food for another, and the same plants remain growing on the same spots for years, nay ages. Yet when nature does, as in the case of forests, produce the same tree to a large extent—the American forests teach us that their rotation also becomes necessary. It would be a curious experiment to endeavor to ascertain whether the exudations of parasitical plants were beneficial or otherwise to the trees on which they are *said* to feed.

Teschemacher's Elements of Hort.

DEPEND ON YOURSELF.—The editor of the Albany Knickerbocker is a sensible man. There is more truth than poetry in the following, which we copy from his spicy paper:

Bad luck as well as mischance and misfortune, are all the daughters of misconduct, and sometimes the mother of success, prosperity and advancement. To be thrown on one's resources is to be cast into the very lap of fortune. Had Franklin entered Philadelphia with a thousand dollars in his pocket, instead of one shilling and ninepence, as he did, in all probability he would have gone on a "spree" instead of hunting up employment, and died at thirty-five from driving tandem teams and drinking brandy-smashers, in-

stead of living to the green old age of eighty, and dying a philosopher, whose amusement was the taming of the thunder bolts and bottling up lightning. Had Napoleon's father been the owner of a princely estate, his son would never have got to be emperor. A good kick out of doors is better for a boy than all the rich uncles in the world. One never tries to swim so hard as when he has to do it or drown. To be a rich man's son is the greatest misfortune that can befal a young man, mentally speaking. Who fill our offices?—not the children of the rich, or the sons of the oppulent. A knowledge of starch and debauchery is all a rich man's son aspires to. The parlor is the scene of their oratory, and hair oil the care of their souls!—poor creatures!

OHIO EVER-BEARING RASPBERRY.

I was not a little astonished to find by the last number of the Farmer and Gardener, that a very brief article of mine on page 245 of the present volume, had been voluntarily appropriated by A. H. Ernst, to his own discomfort, as well as mine. I would not willingly inflict an injury upon any man; and I therefore could not but be pained to find my remarks so illy received by one who, for aught I know, is among the worthiest of nurserymen. It ought to be enough that I assure him, that neither he nor any other individual was mentally present, when I penned those lines.

It had often been stated that no botanist described this plant: I thought it strange that botanical men should live in the midst of this raspberry region, and let the plant pass unnamed (scientifically) and undescribed, for years. Botanists are not so heedless of new species, as this neglect of the Ohio raspberry would imply. To call attention to the subject, and to correct the general impression, if not my own, was the sole object of my observations. I cannot forbear believing that the plant is truly a Rubus occidentalis, agreeing as it does with the minutest botanical description of this species. Late-bearing does not make a *specific* difference, though it may make a well-marked *variety*.

I am glad that the article in question has arrested the notice of one so well prepared to prove or disprove the specific identity of the plants; and hope he will not allow so favorable an oppotunity to pass without presenting to the public, an accurate systematic description of the two varieties, that the question may be settled upon it. I shall anticipate, then, ere long, seeing in the Farmer and Gardener such description of the plants as will establish the true character of the raspberry. If botanists shall adjudge that a specific difference exists, I am willing that my remarks on page 245 shall pass as an unintentional "slander" on the raspberry: if no such description is given by my personally unacquainted friend Ernst; or being given, if botanists adjudge an identity in the plants, we will let the raspberry pass free of any intention to deceive us, and the rest go as excusable "ignorance" on the part of nurserymen. If I am right in my views of the Raspberry, it cannot be avoided that either "ignorance or policy" has so long concealed what ought to have been made known long ago by nurserymen, or others. Nurserymen are fully justifiable in cultivating and selling valuable *varieties* as well as valuable *species;* with this I have nothing to do. The simple question is, is the Ohio ever-bearing raspberry an undescribed *species?* It is an easily answered question; and if not answered, especially under existing circumstances, the public may rest assured that the plant is the *Rubus occidentalis*.

I had always thought, when I next visited Cincinnati, I would endeavor to call on my friend Ernst and traverse his nursery grounds; I consider that I now have an additional reason for doing so. In the mean time he may understand that J. T. P. in the Farmer and Gardener, has always been intended to stand for

JNO. T. PLUMMER,
of Richmond, Wayne Co., Ia.

IMPORTANT FACT.—From Experiments made in England some time since, by Dr. Anderson, it was ascertained that a bushel of wheat measured in a vessel 11 1-2 inches deep, weighed 56 lbs. 6 3 4 oz.; and that a bushel of the same kind of wheat measured in another vessel 8 1-2 inches deep, weighed 56 lbs. 0 1-8 oz., making a difference of rather more than one bushel in 144—a loss of some moment when large quantities are delivered. The same principle will apply to rye, oats, barley, and many other substances sold by measure.—*Am. Ag.*

CORN RAISED FOR FODDER.—D. S. Beers, Knox Co., Ohio, in the Ohio Cultivator, says, "I plowed about three akers of swamp ground that had become dry, but was overrun with weeds, and sowed four bushels of corn on it. From this I cut ten tons of most valuable fodder, and it has proved the most valuable crop I raised this year." Tripple the amount of seed would probably have greatly added to the crop.

MEMORANDA.

Jan.	4,	Newton born,	1642
Jan.	11,	Dr. Dwight died,	1817
Jan.	17,	Franklin born,	1706
Jan.	19,	Copernicus born,	1473
Febru.	17,	Ghent Treaty,	1815
Febru.	18,	Luther died,	1546
Febru.	22,	George Washington born,	1732
March	15,	Andrew Jackson born,	1767
April	3,	Bonaparte dethroned,	1814
May	5,	Napoleon Bonaparte died,	1821
May	29,	Gen. La Fayette died,	1834
June	17,	Battle of Bunker Hill,	1775
June	18,	Battle of Waterloo,	1815
July	4,	American Independence,	1776
July	10,	Christopher Columbus born,	1447
July	30,	William Penn died,	1718
Aug'st	9,	Louis Philip proclaimed,	1830
Aug'st	31,	Bunyan died,	1688
Sept.	30,	Whitefield died,	1770
Octob.	5,	Brainerd died,	1747
Octob.	21,	Admiral Lord Nelson died,	1803
Nov.	8,	Milton died,	1674
Nov.	24,	Peace with Great Britain,	1814
Nov.	25,	New York evacuated,	1783
Decem.	14,	George Washington died,	1799
Decem.	16,	Great fire in New York,	1835
Decem.	31,	Montgomery died,	1755

FARMER'S CALENDAR.

Indian corn: It is an error to plant seed from States farther South. In a cold season only the seed of a colder climate will ripen well.

Often breaking up a surface keeps a soil in health; for when it lies in a hard-bound state, enriching showers run off, and the salubrous air cannot enter.

Weeds exhaust the strength of the ground, and if suffered to grow, may be called garden sins.

The hand and the hoe are the instruments for eradicating weeds: yet if there is room between the rows for the spade it is well to use it.

Never keep your cattle short: few farmers can afford it. If you starve them they will starve you.

It will not do to hoe a great field for a little crop, or to mow 20 akers for five loads of hay. Enrich the land and it will pay you for it. Better farm 20 akers well than 40 akers by halves.

Drive your business before you and it will go easily.

In dry pastures dig for water on the brow of a hill; springs are more frequently near the surface on a height than in a vale.

Rain is cash to a farmer.

The foot of the owner is the best manure for land.

Cut bushes that you wish to destroy in the summer and with a sharp instrument; they will bleed freely and die.

Sow clover deep; it secures it against drought.

Never plow in bad weather, or when the ground is very wet.

It is better to cut grain just before it is fully or dead ripe. When the straw immediately below the grain is so dry that on twisting it no juice is expressed, it should be cut, for then there is no farther circulation of juices to the ear. Every hour that it stands uncut after this stage is attended with loss.

Accounts should be kept, detailing the expenses and produce of each field.

When an implement is no longer wanted for the season, lay it carefully aside, but let it be first well cleaned.

Obtain good seed, prepare your ground well, sow early, and pay very little attention to the moon.

Cultivate your own heart aright, remembering that "whatsoever a man soweth, that shall he also reap." Do not begin farming by building an expensive house; nor erect a spacious barn till you have something to store in it.

Avoid a low and damp site for a dwelling house. Build sufficiently distant from your barn and stock-yard to avoid accidents by fire.

Keep notes of all remarkable occurrences on your farm. Recording even your errors will be of benefit.

Good fences make good neighbors.

Experiments are highly commendable, but do not become an habitual experimenter.

The depredations of birds are fully compensated by the services they render in preying upon insects.

OIL CAKE.

Some of the Results of the Analysis of Oil-Cake, by the Agricultural Chemical Association in Scotland.

1. That the per-centage of the protein compounds, in the analysis called gluten and albumen, is nearly equal to what is contained in peas and beans, and that, therefore, for the production of milk for the cheese-dairy, and also for laying on muscle, oil-cakes are as valuable as beans, peas, or clovers. This is a result somewhat unexpected, inasmuch as the value of oil-cakes in the feeding of stock has hitherto been supposed to depend very much upon their power of laying on fat: in other words, upon the per-centage of oil they contain.

2. The proportion of oil in these cakes is greater than is naturally present in any species of grain or pulse usually cultivated. Oats contain as a maximum about seven, and Indian corn about nine per cent. of oil, but these cakes contain twelve per cent., and are, therefore, in their ability to supply fat to an animal, superior to any of our cultivated grains.

3. These oil-cakes leave six per cent. of ash, of which one-third consists of phosphoric acid: 100 lbs. of oil-cake, therefore, contain two pounds of phosphoric acid. On the other hand, our common kinds of corn — wheat, for example — leave only two per cent. of ash, of which one-half consists of phosphoric acid, or 100 pounds of wheat contain one pound of phosphoric acid. *Therefore,* for laying on *bone,* or for supplying the materials of bone to growing stock, *oil-cake is twice as valuable as wheat,* weight for weight, and *more than twice as valuable as oats or barley* which are covered with a husk.

4. Again the same reasoning shows that, as grains of all kinds draw their phosphoric acid from the soil, these oily seeds will exhaust the soil of its phosphates to a much greater degree than our corn crops: 100 pounds of linseed will carry off twice as much of them from the soil as 100 pounds of wheat.

5. But the same circumstance supplies an additional reason why the manure of *full-grown* store stock fed upon oil-cake is so much richer than that obtained by the use of any other kind of food. It is richer.

(*a*). Because the proportion of the protein compounds (albumen, &c.) in the oil-cake is greater than the fattening animal can appropriate, and thus much of them passes off in a more or less changed state, and is mixed with the dung.

(*b*). The oil also is in larger proportion than can at times be laid on their bodies even by fattening stock, and this unquestionably contributes to the fertilizing quality of the manure.

(*c*). But the full-grown animal appropriates scarcely any of the *phosphates*—the whole of these therefore, which the animal consumes in its food, appears again in its dung. And the oil-cakes being richer in these phosphates weight for weight, than any kind of corn used for food, the dung thus made is also richer in these phosphates than that which is obtained from animals fed upon almost ny other kind of food.

BLACKBERRY SYRUP.—No family should be without it, as it has generally proved a sovereign remedy for complaints of the bowels:

"To two quarts of blackberry juice, add half an ounce EACH of powdered nutmeg, cinamon and allspice, and a quarter of an ounce of powdered cloves. Boil these together to get the strength of the spices, and to preserve the berry juice. While hot add a pint of fourth proof pure French brandy, and sweeten with loaf-sugar. Give a child two teaspoonfuls three times a day, and if the disorder is not checked, add to the quantity."

There are bad things both sides of the mouth, a good deal of evil that ought never to go in, and a good deal of evil that ought never to come out.

AGRICULTURE IN CHINA.—The great requisites in the Chinese system of agriculture are manure and water; and, to obtain these, their whole energies are devoted. The soil is rarely allowed to lie fallow, and in most parts produces two crops annually. It is assiduously pulverized, and different soils are also mixed together to improve the quality of each. They will carry sand for a long distance, to mix with clay—heavy soils and loam to put with that which appears too loose. During the few months of winter, in the southern provinces, the soil is sometimes thrown up into heaps, where it has been mixed with some vegetable matter, thus making a kind of compost, and also presenting a greater surface to the air; after which, those lands which require flooding are covered with water, and hoed and turned over until the whole surface is reduced to mud. This process has still a further fertilizing tendency. For a manure, the chinese collect everything of a vegetable or animal kind that can possibly be applied to such a purpose. Reservoirs of brick or wood are dug in the banks of the field, near a canal, into which every refuse substance is put. The principal one has a roof over it, and is plastered, that the contents may not be absorbed into the earth. Besides this principal one, large vases of stoneware are sunk in the ground, at convenient places, for the use of passing travellers. The children and poor people are continually employed in collecting refuse animal and vegetable matter with which to fill up these receptacles; the sweepings of the streets, hair from the barbers' shops, offal from the butchers, feathers, horns, and bones reduced to powder, soot, and the deposits of creeks and rivers, are all industriously gathered up and thought sufficiently valuable to be carried a great distance, especially if water-carriage is convenient. The dung of all animals is esteemed above any other kind of manure; it often becomes an article of commerce, in the shape of small cakes, which are made by mixing with it a portion of loamy earth, and then thoroughly drying them. These cakes are never applied dry, but are diluted in as much animal water as can be procured. Old plaster is esteemed so valuable a fertilizer as sometimes to induce a farmer to replaster an old room that he may fertilize his fields with it. Before manure is taken out of the receptacle, in the field, it is suffered to become half putrified, in which state it is put upon the plants. Some seeds are put into manure until they have germinated, while others are planted enveloped in their appropriate manure. After the plant has grown a few inches, it is again manured with that which is much diluted. The effect is immediately apparent in an accelerated growth.—*Chinese Repos.*

A CHEAP AND DURABLE CEMENT.—Take two parts of ashes, sifted fine and clean, three parts clay, and one of sand: these being well mixed together, add warm linseed oil and make a proper consistence to be applied with a paint-brush. This will be found useful in pointing of chimneys, stopping on the roof about chimneys, in gutters, and other places on buildings where there are leaks.—*Prairie Farmer.*

When one praised a good man liberally before his face, he exclaimed, "Hold! do not strike fire so near my tinder."

"SHUT YOUR MOUTH."

I heard a lad, in anger, use this expression to another. It was not very bad advice, though given somewhat roughly.

When I hear some of our mincing Misses singing, now away up and now away down, tossing their heads and rolling their eyes, I think, well Miss, if you knew what folks thought of you, you'd *shut your mouth*

I have seen many men ruined because they did not know how to *shut their mouth*, when tempted to say "Yes," to a bad business.

When I see a man standing before the bar just ready to drink, I think, Ah! my fine fellow, if you will not keep your mouth shut before *that* bar, you will, by and bye, find yourself before a Bar where it will be shut tight enough.

When I hear a fine lady scolding till every rooms rings; or tattling from house to house—or scandal-mongering; I think, Ah, my lady; with all your schooling, you never learned how to *shut your mouth.*

PREVENTING INCRUSTATION IN STEAMBOILERS.—It has been found by experiments on the Southampton (Eng.) railway, that putting muriate of ammonia, commonly called sal ammoniac, into the boiler, will prevent the incrustation or deposit on the inside of boilers, which is frequently so troublesome to engineers. About a pound of ammonia, for 1500 or 2000 gallons, is sufficient. It has been found to have no effect upon the iron whatever. In order, however, to ascertain whether this substance will answer in all cases, it will be necessary to try it in places where the water used is impregnated with different substances.

Brit. Amr. Cult.

INFLUENCE OF THE MOON. That the moon affects the tides, and in like manner attracts the water of the clouds, all ought to know; but if any think it exerts a controlling influence over the weather, or the growth of vegetation, it is well to remind them of the results to which the late Dr. Olbers, the distinguished astronomer of Germany, (who discovered the planets Pallas and Vesta,) was led by an examination, founded on careful meteorological observations for fifty years in different countries. "I believe," he says, "that I have *demonstrated* that the influence of the moon upon the weather is so small, that it is *totally lost* amid the great variety of other forces and causes which change the state of our atmosphere; and, that its pretended influence on men, animals, or plants, is *all of it* due to illusion and prejudice."

Plato being told that some persons had spoken ill of him, said, "It matters not, I will endeavor so to live that nobody will believe them."

"I never knew," said Lord Erskine, "a man remarkable for heroic bravery, whose very aspect was not lighted up by gentleness and humanity."

A TRUE STORY.

In the evening of the day Alice arrived at S———, a great experience meeting was to be held in one of the Churches. Her friend who had become enthusiastic in the cause, urged her to go to this meeting, which Alice did, although with a feeling of reluctance. The house was crowded above and below. The preliminaries usually appertaining to such meetings having been arranged, a brief opening address was made by one of the ministers. A reformed man then related his experience with great effect. After he had finished there was a pause of nearly a minute. At length a man who had been seated far back, with his face partly turned from the audience, arose slowly and moved to the front of the stage.

A half suppressed exclamation escaped Alice, as her eyes caught the well known features of him who had been her husband, while a quick thrill ran through her. Then her frame trembled in accord with her fluttering heart. The face of Mr. Delancy had greatly changed since she had last looked upon it. Its calm, dignified elevation had been restored, but with what difference! What before was cheerful, was sad, very sad.

"Mr. President," he began in a broken voice, "although I had consented, at your urgent solicitation, to address this large assembly to-night, yet I have felt so strong a reluctance to doing so, that it has been with the utmost difficulty I could drag myself forward. But I had passed my word; I could not violate it. As to relating my experience, that I do not venture upon. The past I dare not recall. Would to heaven that just ten years of my life were blotted out."

The speaker paused a moment, already much affected. Then resuming in a firmer voice, he said:

"But something must be said of my own case, or I shall fail to make that impression upon your minds that I wish to produce.

"Pictures of real life touch the heart with power, while abstract presentations of truth glitter coldly in the intellectual regions of the mind, and then fade from the perception like figures in a diorama.

"Your speaker once stood among the first members of the bar in a neighboring State. Nay, more than that—he represented his county for three successive years in the Assembly of the Commonwealth. And more than that still, occupied a seat in Congress for two Congressional periods."

At this announcement the stillness of death pervaded the whole assembly:

"And yet more than all that," he continued, his voice sinking in a low thrilling tone—"he once had a tenderly loved wife and two sweet children. But all these honors—all these blessings have departed from him," he contunued, his voice growing louder and deeper in his effort to control himself. "He was unworthy to retain them! His constituents threw him off because he had debased himself and disgraced them. And worse than all—she who had loved him devotedly—she who had borne him two dear babes, was forced to abandon him and seek an asylum in her father's house. And why? Could I have become so changed in a few short years? What power was there to abuse me that my fellow beings spurned, and even the wife of my bosom turned away heart-stricken from me? Alas! my friends, it was a mad indulgence in mockery. A very demon—a Circe, changing the human into a beast. But for this I were now an honorable and useful representative in Congress, pursuing after my country's good, and blest in the home-circle with wife and children. But I have not told you all. After my wife separated from me I sank rapidly.

"A state of perfect sobriety brought too many terrible thoughts; I therefore drank more freely, and was rarely, if ever, from under the bewildering effects of partial intoxication. I remained in the same village for some years, but never once saw her during that time—nor a glimpse of my children. At last I became so abandoned in my life, that my wife urged on by her friends, doubtless, filed an application for a divorce, and as cause could easily be shown why it should be granted, a separation was legally declared.

"To complete my disgrace, at the next Congressional canvass, I was left off the ticket, as unfit to represent the district. I left the county and State where I had lived from my boyhood up.

"Three years have elapsed since then. For two years of the period I abandoned myself to the fearful impulse of the appetite I had acquired. Then I heard of this new movement—the great temperance cause. At first I sneered, then wondered, listened at last, and finally threw myself upon the great wave that was sweeping onward, in hopes of being carried by it far out of the reach of danger, and I did not hope with vain hope. It did for me all and more than I could have dreamed. It set me once more upon my feet—once more made a man of me.

"A year of sobriety, earnest devotion to my profession and fervent prayers to Him who alone gives strength to every good resolution, has restored to me much that I had lost—but not all—not the richest treasure that I had proved myself unworthy to retain—not my wife and children. Ah! between myself and these the law has laid its stern impassable interdiction. I have no longer a wife—no longer children; though my heart goes out towards these dearly beloved ones with the tenderest yearnings.—Pictures of our early days of wedded love are ever lingering in my imagination. I dream of the sweet fireside circle; I see ever before me the once placid face of my Alice, as her eyes looked into my own with intelligent confidence. I feel her arms twine about my neck; the music of her voice is ever sounding in my ear"

Here the speaker's emotions overcame him. His utterance became choked, and he stood silent, with bowed head and trembling limbs. The dense mass of people were hushed into an oppressive silence, that was broken here and there by half stifled sobs.

At this moment there was a movement in the crowd. A single female figure, before whom every one appeard instinctively to give way, was seen passing up the aisle. This was not observed by Delancy, until she had nearly came in front of the platform on which he stood. Then the movement caught his ear, and lifting his eyes they instantly fell on Alice—for it was she that was passing onward—he bent forward towards her with suddenly uplifted hand and eager, eyes, and stood like a statue until she had gained the stand and advanced quietly to his side. For a moment the two stood thus; the whole audience, thrilled with the scene, were upon their feet and bending forward. Then Delancy opened his arms, and Alice threw herself upon his bosom with a quick wild gesture.

Thus for the space of a minute they stood—every one fully, by a singular intuition, understanding the scene. One of the ministers then came forward, and gently separated them.

"No, no," said Delancy, "you must not, you cannot take her away from me."

"Heaven forbid that I should do that!" replied the minister. "By your own confession she is not your wife."

"No, she is not," returned Delancy, mournfully.

"But she is ready to renew her vows again,"—Alice said smiling through her tears that now rained over her face.

Before that large assembly, all standing and with few dry eyes, was said in a broken voice, the marriage ceremony, that gave Delancy and Alice to each other. As the minister, an aged man, with thin white locks, finished the rite, he laid his hands upon the heads of the two he had joined in holy bonds and lifting up his aged eyes, that streamed with drops of gladness, he said, in a solemn voice.

"What God hath joined together, let not RUM put assunder."

"Amen!" was said by the whole assembly, as with a single voice.

INFLUENCE OF MUSIC.—Three men became hopefully pious about the same time. They were neighbors, heads of families, and singers. For a season they lived together in love, exhibiting in their lives the fruits and graces of the spirit. They often united their prayers and praises in concert sweet; but on a certain occasion as one of them was passing the house of another, he heard loud words. He listened and found that his neighbors were engaged in angry dispute. He went into the house and accosted them by saying, "Come, neighbors, let us sing one of our favorite hymns," and immediately commenced singing

"How pleasant 'tis to see
"Kindred and friends agree."

They became silent, gazed at him, at each other, and then *one* joined the singing. The other very soon followed his example, and the three neighbors sung harmoniously together as usual, till all their angry passions were lulled to sleep. They parted in pence, and lived many years afterwards in harmony and love.

Few will doubt that music on this occasion was more potent and effectual in reconciling the angry friends to each other, than would have been an extended exhortation from their neighbor.

Sing at your work:—'twill lighten
The labors of the day;
Sing at your work;—'twill brighten
The darkness of the way.

Sing at your work;—though sorrow
Its lengthened shade may cast,
Joy cometh on the morrow,
A sun-beam cheers the blast.

To pain a brief dominion
Is o'er the spirit given,
But music nerves the pinion
That bears it up to heaven.

VIRTUES AND VICES.—I once heard one of the cleverest men I ever knew observe, "virtues lie in the medium, vices in the extreme—and every virtue has its attendant vice." The practice of virtues, *with* their attendant vices, is common—the practice of virtues without, alone, rare, excellent and beautiful.—We have generosity and extravagance—justice and severity—tenderness and weakness—economy and covetousness, walking hand and hand. How few there are who learn well to consider and watch over their nature and the habits of their minds, and to avoid the evil tendencies of their constitutional virtues.

A lady applied to Reynolds the philanthropist for aid to an orphan. After he had given liberally, she said, "When he is old enough, I will teach him to thank his benefactor." "Stop," said the good man, "we do not thank the clouds for rain: teach him to look higher and thank Him who giveth both clouds and rain."

BOUNDARIES OF CHRISTENDOM. Take a map of the world and encircle with your pencil every country where woman is not a slave, or a prisoner; where life and property are secured by just laws; where civilized manners are found; and where the enlightening sciences have burst the fetters of the mind, and you will encircle precisely the regions on which the rays of revelation shine.

THE WINE-DRINKERS. — It is not generally known that wine *baths* are quite common in France — nevertheless, such is the case. The Duke of Clarence is not the only gentleman who has enjoyed an immersion in malmsey. Punch has tried it with the very best sherry. Only imagine! Punch — the veritable English Punch — swimming in French wine, and kicking, plunging, and laughing, until the tears ran down his cheeks, and never thinking of the expense—a five frank piece!

"What! a five franc piece for a tub full of wine? Hurrah! *Vive la France!*"

"Gently—gently. At least *fifty* others bathed in the same wine—*after* Punch. The keeper of *bagne* had a preference for Punch, and gave Punch the first dip. *After* him came fifty others—making in all *fifty* five-franc pieces. A good price for the tub."

"The wine was then thrown out?"

"Not at all. Not so, by any means."

"What then?"

"Bottled! Bottled, of course."

"Bottled! And for what purpose?"

"Why, for drink, to be sure."

"Drink! Who would drink such stuff?"

"Why, the English do—the Yankees do! The latter import it in large quantities. It is a great favorite in Yankee-land."

Now, dear wine-drinking friends, anti-temperance friends, when you next smack your lips over a glass of champagne or burgundy, reflect that a Lyonese alderman may possibly have bathed in it, and see if the reflection will assist you in appreciating its flavor.

Sir John Mason, an eminent English statesman, said on his death-bed, "Lo, here have I lived to see five princes, and have been privy-counsellor to four of them; I have seen the most remarkable things in foreign parts; and have been present at most state transactions for thirty years; and have learnt this afso many years experience—that *temperance* is the best physician; seriousness is the greatest wisdom; and a good conscience the best estate!"

THE
WESTERN FARMER AND GARDENER'S
ALMANAC,
FOR
1847,

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